SOLIS BIODYNE

INNOVATION POWERED **BY NATURE**

Product Catalog

MJS BioLynx

A Division of...

CHROMATOGRAPHIC SPECIALTIES INC.

1-888-593-5969

biolynx.ca · tech@biolynx.ca

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Teaduspargi 9, 50411 Tartu, Estonia
T: +372 7409 960 / **F:** +372 7402 079
E: info@solisbiodyne.com
Skype: solis.biodyne / **W:** solisbiodyne.com

VAT No: EE100587614 / **Reg. No:** 10242922
Bank details: **Swedbank AS**
IBAN code: EE692200221005142234, SWIFT/BIC.: HABAEE2X
Bank address: Liivalaia 8, 15040 Tallinn, Estonia

About Solis BioDyne

- Established in 1995
- Supplier of room-temperature stable PCR reagents
- Trusted trademark in 110+ countries
- ISO 9001 and ISO 13485 certified

We help scientists solve their greatest challenges by creating world-changing molecular solutions. Users around the globe value the high quality of our enzymes and mixes.

Commitment to quality

Quality has always been the core value of our work. To ensure we meet your quality requirements in Research and Diagnostics, we implemented and follow ISO standards.

- Proven lot-to-lot consistency and high quality
- Total control over manufacturing process
- Supply chain security and traceability
- Manufacturing process consistency

QUALITY SYSTEM CERTIFICATION DNV ISO 13485

QUALITY SYSTEM CERTIFICATION DNV ISO 9001

Our expertise fields

- *In silico* protein design
- Protein production and purification
- Assay and product design
- Production of solutions for reverse transcription, PCR, qPCR, and LAMP

30 years of experience in protein design and production on an industrial scale

2025
- Lyo-ready 1-step RT-qPCR
- HiFi Master Mix
- Long-range Master Mix
- High discrimination polymerase
- SNP genotyping Master Mix

2024
- Endpoint RT-PCR Master Mix
- HiFi enzyme
- Lyo-ready qPCR kit

2023
- Solutions for isothermal amplification
- SOLIScript® Fast 1-step RT-qPCR Mix with UNG
- Lyophilisable products for POC devices

2022
- SARS-CoV-2 RT-qPCR kit (IVD and RUO)
- UNG

2020
- 1-step solution for SARS-CoV-2
- 1-step Dye-based RT-qPCR

2019
- SolisFAST® product range

2018
- ISO 13485:2016 Certificate
- 1-step probe-based RT-qPCR

2017
- Korea StabilityTAG patent No 10-1773636
- Reverse Transcriptases FIREScript® & SOLIScript® and cDNA synthesis Kits and Mixes

2016
- US StabilityTAG patent No 9,321,999

2015
- EU StabilityTAG patent No EP2501716
- HOT FIREPol® Multiplex PCR Master Mixes

1995
- Founded

Product Portfolio

DNA polymerases	FIREPol® HOT FIREPol®	TERMIPol® HOT TERMIPol®	SolisFAST®	SoliSD™
Endpoint PCR	Regular PCR Master Mixes	HOT-start PCR Master Mixes		
qPCR	Dye-based qPCR Mixes	Probe-based qPCR Mixes		
Reverse transcription	Reverse transcriptases	cDNA synthesis kits and mixes	One-step RT-(q)PCR kits	
Additional proteins	Salini UNG®	RiboGrip®		
Lyophilizable products	Probe-based qPCR mix			
Isothermal amplification	Regular	Lyo-compatible		

Reference:

> **Excellent product quality along with affordable prices and committed customer service: these are the reasons why Solis BioDyne is our strategic enzyme supplier since many years. Now we continue our partnership with the robust, stable and very sensitive SolisGreen mixes for our qPCR product platform.**

DAVIDE ROASCHIO
Scientist in Product Development Loewe Biochemica GmbH, Germany

Sharing 30 years of expertise for your success

In every step of the process you are supported and consulted by a Technical Support Team. From choosing the right product to protocol optimization, you can be sure we help to overcome technical hurdles.

Feel free to contact us, to find the most effective way for your scientific success: info@solisbiodyne.com.

Sustainability is the key priority

To contribute to the eco-friendly environment we have been sending out our products at room temperature for 30 years. Not only is it good for the environment, but it's also financially much more reasonable and significantly lowers the amount of time it takes to send out the order.

All catalog products are safe to ship and handle at room temperature for ~30 days. So you can be sure to receive a product that works, no matter where in the world you live, and enjoy the peace of mind.

Solis BioDyne as your business partner

Reference:

> Strategic cooperation with the Solis BioDyne team has been one of the most efficient we have experienced during our COVID-19 diagnostic kits products development. Their room temperature stable mastermix is an excellent product which has helped us to reach higher sensitivity and stability of our qPCR diagnostic kits.

PETER KILIAN
Chief Operating Officer at MultiplexDX

Collaboration partners:

- Leading kit manufactures in Europe with private & government contracts
- Local SME's to branches of global corporations
- Clients from outpatient testing to food safety analysis

Core Expertise:

- High quality development and manufacturing
- Innovation and R&D
- Flexibility and speed of action
- Strategic partnership
- Committed product management, technical support, and R&D
- Help with assay optimization and implementation

> Being an R&D driven manufacturer, gives flexibility and time-to-market leverage to come out with a product and solution, that meets your specific needs. With extensive knowledge in our field, we are here to support you all the way, from technical aspects and assay optimization to marketing.

KAIJA PELT
Head of Supply Chain & Production

Our services

Solis BioDyne has always welcomed all innovative ideas with open hands. In order to elevate our mission and introduce new solutions to the field of genetic testing, we are delighted to present to you our OEM service offerings. Learn how you can implement the Stability TAG technology into your business.

Contract manufacturing

- You are looking for an experienced manufacturer of enzymes and proteins
- You are looking for a primary/secondary production site for your protein
- You are looking for competence in codon optimization for production in E.coli

Product development

- You are looking for specific formulations (e.g., high concentrated, gly-free)
- You are working with (RT-q)PCR master mixes, but you seem to not find the master mix that is a good fit for your assay
- You are working on a special application that requires specific proteins or enzymes not available on the market

Assay development

- You are looking for a master mix and/ or assay development for specific targets
- You are looking for competence in (RT-q)PCR experiment optimization for your existing assay design

White labeling

- You have a strong brand and market presence, and you would like to broaden your product portfolio with existing solutions from Solis BioDyne

Process of our services

Phase I

Together with your team, we will define the required features of your desired solution. The most suitable service will be chosen.

Phase II

We will mutually agree on the responsibilities, volumes, timelines, budgets, and contractual details.

Phase III

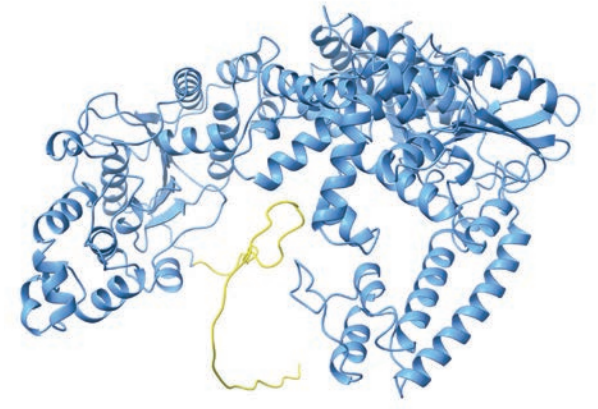
The prototype will be sent to you for testing and approval.

Phase IV

Together we define the next steps of bulk production to set you up for success!

Unique & Patented Stability TAG Technology

3D MODEL OF FIREPOL® DNA POLYMERASE INCLUDING STABILITY TAG



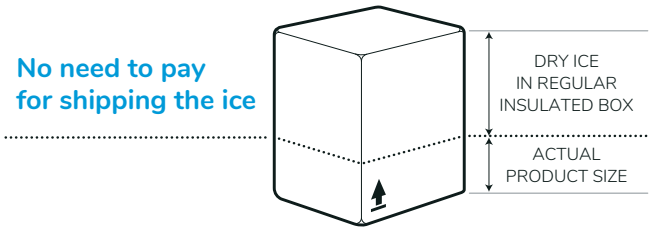
Thermus aquaticus DNA polymerase Stability TAG

Proteins designed to withstand higher temperatures

- Increased stability and overall shelf-life
- Compatibility with high throughput robotic systems
- Increased freeze-thaw cycle tolerance
- Environmentally friendly cold chain free shipping

Safe storage

Our reagents remain fully active even after a power outage has damaged everything else in your freezer, after someone has forgotten the reagents on the table overnight, or if there have been delays in the customs during shipment. Routine storage at -20°C is required to ensure maximum shelf-life.



Ice-free shipping

Our Stability TAG technology means we can ship your order without dry ice and large insulation boxes, which is better both for the environment and your budget:

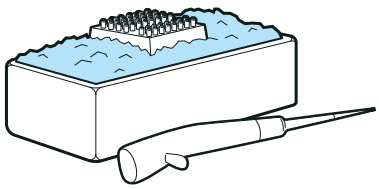
- **less material** used for packaging
- **lower package weight**
- **significant decrease** of CO_2 footprint
- **lower shipping charges** for you
- **no additional regulations** for shipping and receiving the goods
- **accessible for all labs**

Convenient reaction set-up

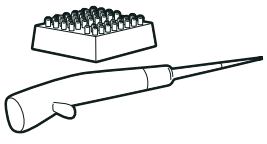
Our room temperature stable enzymes allow ice-free reaction set-up.

- Saves valuable bench space
- Convenient for high-throughput workflows
- No harm is done if you forget your enzymes out of fridge for weeks

REACTION SET-UP ON ICE



REACTION SET-UP AT ROOM TEMPERATURE



Stability TAG ensures product stability at room temperature* for 30 days

All enzymes produced at Solis BioDyne, including DNA polymerases and reverse transcriptases, as well as other proteins (i.e. RNase inhibitor, Uracil-N-glucosylase), are exceptionally stable at room temperature due to a proprietary genetic modification in the polypeptide structure - **Stability TAG** (EU Patent EP2501716, Korea Patent No 10-1773636 and US Patent No 9,321,999).

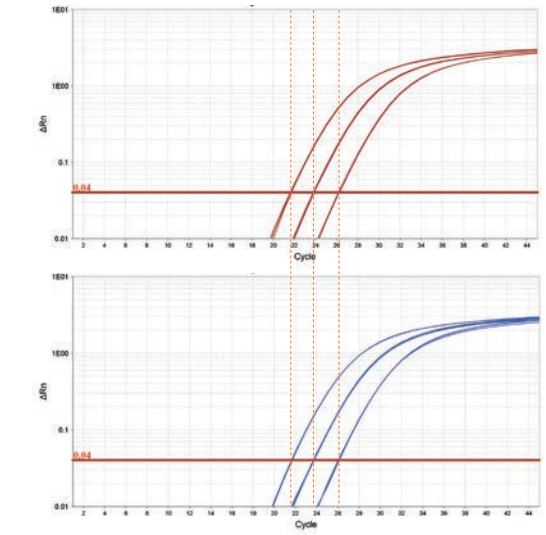
All our products can withstand at least 1 month at room temperature without detectable change in the performance of the product, which enables shipping our products without ice. The exceptional product stability is furthermore supported by our unique buffer composition.

Stability TAG enhances also long-term stability of our enzymes stored at -20°C which is the recommended storage temperature of all our products upon arrival, to ensure maximum shelf-life.

* Room temperature is 15-25°C according to "Guidelines for the Storage of Essential Medicines and Other Health Commodities", World Health Organization (2003).

STABILITY OF HOT FIREPOL® DNA POLYMERASE

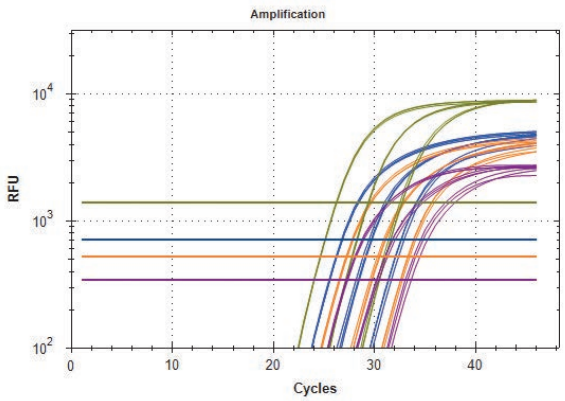
HOT FIREPol® Probe Universal qPCR Mix shows no loss of activity after incubation at room temperature for 1 month (upper graph) compared to storing at –20ºC (lower graph).



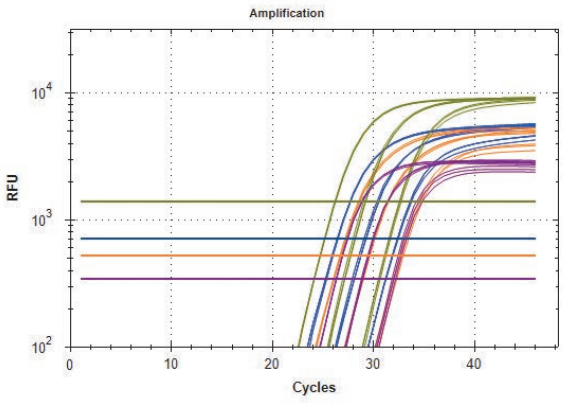
HOT FIREPol® Probe Universal qPCR Mix room temperature

HOT FIREPol® Probe Universal qPCR Mix -20°C

A) Test Sample of SolisFAST® Probe qPCR Mix: stored for **6 months at +25°C**



B) Reference Sample: **stored at -20°C only**



STABILITY OF SOLISFAST® DNA POLYMERASE

A Test Sample of the SolisFAST® Probe qPCR Mix (no ROX) was incubated at +25°C for 6 months. A Reference sample of this product was stored at -20°C only. 4-plex qPCR reactions (FAM, blue; VIC, green; JUN, orange; Cy5, purple) using both the Test sample (A, left graph) and the Reference sample (B, right graph) were performed on the Bio-Rad CFX96 platform, using three 10-fold serial dilutions of human gDNA (from 2 ng/µl to 0.02 ng/µl). No significant changes in Cq values and fluorescence levels were detected.

New products

SolisFAST® Lyo-Ready qPCR Kit with UNG

- Optimized solution for fast and sensitive amplification and quantitation of DNA targets with probe-based assays
- Enables sensitive and specific DNA detection
- Contains dUTPs and UNG to prevent carryover contamination
- Compatible with fast cycling – results in 30 minutes
- Performance preserved after lyophilization
- Compatible with lyophilization to beads or cakes

Read more page 40

RiboGrip® RNase Inhibitor (220U/µl)

- Novel *in silico* engineered, protein-based RNase inhibitor
- Exceptional stability – stable for up to 60 °C for 1 hour
- Unique high-concentration formulation
- Efficient protection of RNA at low DTT concentrations
- Lyo-compatible glycerol-free formulation available

Read more page 33

SoliSD™ Bsm DNA Polymerase Kit

- Implemented Stability TAG and the unique SoliSD™ Supplement system improve the performance of the enzyme.
- Stable for at least 1 month at room temperature
- No NTC signal
- Fast time to result from 4 minutes
- Strong strand displacement activity
- Active at 51-62°C with optimum at 60°C
- **Also available in glycerol-free format**
- **RT-LAMP kit available as well**

Read more page 42

SolisFAST® 1-step RT-PCR Kit with UNG

- Faster than ever – under 1-hour RT-PCR cycling protocol
- Superior sensitivity – detect as little as 0.1 pg of RNA
- Discover the convenience of multiplexing – amplify up to 5 targets within one reaction
- Prevent carry-over contamination with preblended UNG enzyme
- Enhance sensitivity and tackle GC-rich amplicons with AmpliBoost™ RT-PCR enhancer
- Inherently stable due to proprietary Stability TAG technology
- **Ready to Load** version available to streamline your gel electrophoresis workflow

Read more page 39

Product Selection Guide: Endpoint PCR Enzymes and Master Mixes

	Hot Start	Ready To Load	dUTP+ UNG	Fidelity vs. Taq	Amplification Range[a]	Resulting ends	Speed	GC-rich performance	Multiplex PCR	Page(s)
SolisFAST® Master Mix	●			1x	5 kb	3'A	* * *	*	* * *	9-10
SolisFAST® Master Mix Ready To Load	●	●		1x	5 kb	3'A	* * *	*	* * *	9-10
SolisFAST® Master Mix with UNG	●		●	1x	5 kb	3'A	* * *	*	* * *	9-10
SolisFAST® Master Mix with UNG Ready To Load	●	●	●	1x	5 kb	3'A	* * *	*	* * *	9-10
HOT FIREPol® Multiplex Mix	●			1x	5 kb	3'A	*	*	* * *	11
HOT FIREPol® Multiplex Mix Ready To Load	●	●		1x	5 kb	3'A	*	*	* * *	11
HOT FIREPol® Blend Master Mix	●			5x	5 kb	3'A/ Blunt	*	**	**	12-13
HOT FIREPol® Blend Master Mix Ready To Load	●	●		5x	5 kb	3'A/ Blunt	*	**	**	12-13
HOT FIREPol® GC Master Mix	●			1x	5 kb	3'A	*	* * *	*	14
FIREPol® Master Mix				1x	5 kb	3'A	*	*	*	15
FIREPol® Master Mix Ready To Load		●		1x	5 kb	3'A	*	*	*	15
HOT FIREPol® DNA Polymerase Kit	●			1x	5 kb	3'A	*	* *	* *	16
FIREPol® DNA Polymerase Kit				1x	5 kb	3'A	*	* *	* *	17

[a] Enables amplification of up to 5 kb fragments from low complexity DNA templates (e.g. cDNA, lambda, plasmid DNA), and up to 3 kb from genomic DNA (human, animal, plant).

SolisFAST® PCR Master Mixes

Description

A ready-to-use 5x-concentrated solution for fast and ultra-fast singleplex and multiplex endpoint PCR assays. It contains a novel SolisFAST® DNA Polymerase with fast hot-start (30 sec to 3 min) and 2-4 times faster extension rates (15-30 sec/kb) compared to the wild-type Taq DNA polymerase (60 sec/kb), HOT FIREPol® and FIREPol® DNA polymerases. The mix allows amplification of up to 5 kb DNA templates and has two versions - regular and Ready To Load mix which includes loading dyes for direct loading to gel. Additionally, mixes with dUTP and UNG are available to prevent carry-over contamination. Experiments with SolisFAST® Master Mix with dUTPs and UNG have also shown a more robust performance with difficult sample materials (i.e soil).

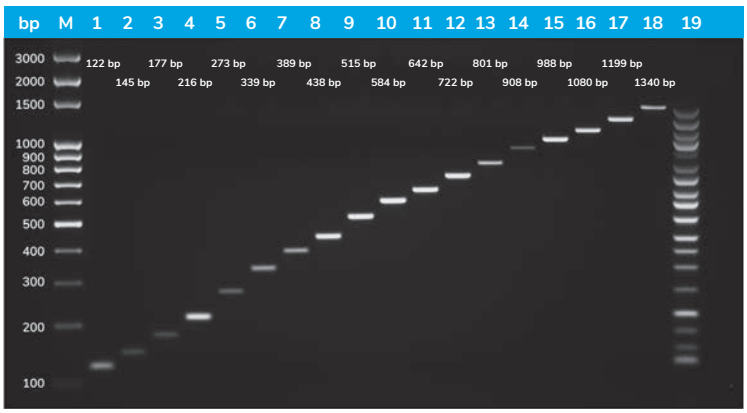
Benefits

- PCR results in **20 minutes**
- fast hot-start (30 sec-3 min)
- fast amplification (15-30 sec/kb)
- sensitive detection of **up to 18 targets** per reaction
- suitable for templates up to 5 kb
- reliable results in Sanger sequencing applications
- **Ready To Load** mix available for direct loading to gel
- **UNG-mix** available to prevent carry-over contamination
- reaction set-up and shipment **without ice**

Reference:

> I first attempted to amplify an insect DNA gene with HOT FIREPol® Blend Master Mix in soil samples containing many inhibitors. The few amplicons obtained were non-specific. I then tested the SolisFAST® Master Mix UNG on the same samples and was finally able to get better yield and specific amplifications of my target gene.

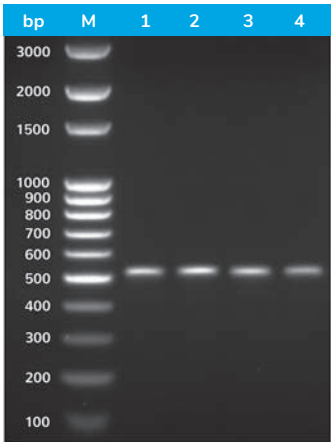
MELLE ELIANE LOUISANNA
UMR ECOlogie des FOrêts de Guyane (ECOFOG)



RESULTS IN 20 MINUTES

SolisFAST® Master Mixes are suitable for 'slow' and 'fast' PCR cyclers. *HIRA* gene fragment (515 bp) from human gDNA was amplified using SolisFAST® Master Mix (lane 1-2) and Master Mix with UNG (lane 3-4). Fast cycling settings (initial activation 1 min at 98°C; denaturation 5 sec at 98°C, annealing/extension 20 sec at 60°C, 25 cycles) were used on Biometra T1 Thermocycler (lane 1 and 3) and Eppendorf® Mastercycler® X50s (lane 2 and 4).

PCR cycler	Cycler's ramp rate	PCR run time (min)
Biometra T1 = 'slow' machine	4°C/sec	26
Eppendorf X50s = 'fast' machine	10°C/sec	20



Tip!

Reduce reagent cost and reaction set-up time by detecting multiple targets in a single reaction.

EXCELLENT SINGLEPLEX AND MULTIPLEX PCR RESULTS

Eighteen fragments of human gDNA (ranging from 122 to 1340 bp) were amplified in singleplex (lane 1-18) and multiplex (lane 19) PCR. Amplifications were performed as a single run on Eppendorf® Mastercycler® X50s using 3-step cycling program optimized for multiplex assays (initial activation 2 min at 98°C; denaturation 10 sec at 98°C, annealing 10 sec at 60°C, extension 30 sec at 72°C (30 cycles).

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	SIZE in ml	READ MORE
SolisFAST® Master Mix	24-01-0000S (free sample) 24-01-00001 24-01-00001-5 24-01-00020	50 250 5 x 250 5000	0.2 1 5 x 1 20	
SolisFAST® Master Mix **Ready To Load**	24-02-0000S (free sample) 24-02-00001 24-02-00001-5 24-02-00020	50 250 5 x 250 5000	0.2 1 5 x 1 20	
SolisFAST® Master Mix with UNG	24-21-0000S (free sample) 24-21-00001 24-21-00001-5 24-21-00020	50 250 5 x 250 5000	0.2 1 5 x 1 20	
SolisFAST® Master Mix with UNG **Ready To Load**	24-22-0000S (free sample) 24-22-00001 24-22-00001-5 24-22-00020	50 250 5 x 250 5000	0.2 1 5 x 1 20	

Products and samples
can be ordered via **e-mail:** orders@solisbiodyne.com, via **skype:** solis.biodyne, via **phone:** +372 740 9960, or via our **e-shop:** solisbiodyne.com

HOT FIREPol® MultiPlex Mix & MultiPlex Mix Ready To Load

Description

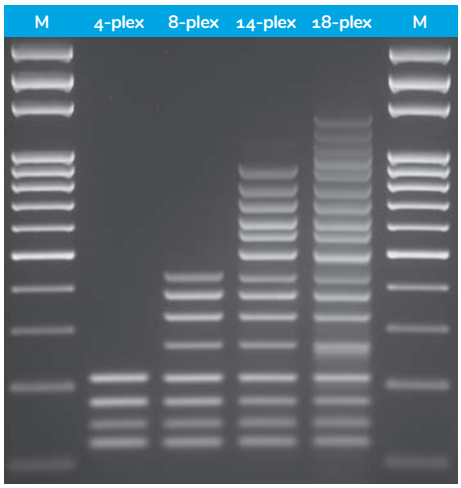
A ready-to-use 5x-concentrated solution for singleplex and multiplex endpoint PCR assays. It contains a hot-start Taq DNA polymerase HOT FIREPol® and allows amplification of up to 5 kb DNA templates. The mix has two versions - regular and Ready To Load mix which includes loading dyes for direct loading to gel.

Benefits

- sensitive detection of **up to 18 targets** per reaction
- suitable for templates up to 5 kb
- increased sensitivity and yield
- reduced **primer dimer** formation
- **Ready To Load** mix available
- reaction set-up and shipment **without ice**

SENSITIVE AND SPECIFIC RESULTS

Different genes from human gDNA were amplified in multiplex reactions using HOT FIREPol® MultiPlex Mix. Amplicons ranging from 122 bp to 1340 bp show similar yield and high specificity with simultaneous amplification in 4-, 8-, 14, and 18-plex PCR assays.



Researchers already trust MultiPlex Mix

Reference:

> Convinced with the performance and quality of the product in multiple applications: robust enzyme activity and reproducible results in single and highly multiplexed PCRs. A "must-have" in the laboratory.

DR. SERGEY YAKUSHEV
Head of the laboratory
Microsynth, Switzerland

Selected publications:

- Schmitt, S. et al., PNAS. (2024)
- Jackson, P. P. J et al, J Appl Microbiol. (2023)
- García-Meseguer, A. J. et al., Insects. (2023)
- Grbin, D. et al., J Invertebr Pathol. (2023)

Did you know?

Products specifically developed for multiplex assays contain sufficient amount of reaction components for accurate amplification of all targets.

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	SIZE in ml	READ MORE
HOT FIREPol® MultiPlex Mix with 10 mM $MgCl_2$	04-34-00S20 (free sample) 04-34-00120 04-34-00120-5 04-34-00120-10 04-34-02020	25 250 1250 2500 5000	0.1 1 5x1 10x1 20	
HOT FIREPol® MultiPlex Mix Ready To Load with 10 mM $MgCl_2$	04-36-00S20 (free sample) 04-36-00120 04-36-00120-5 04-36-00120-10 04-36-02020	25 250 1250 2500 5000	0.1 1 5x1 10x1 20	

Products and samples
can be ordered via **e-mail:** orders@solisbiodyne.com, via **skype:** solis.biodyne, via **phone:** +372 740 9960, or via our **e-shop:** solisbiodyne.com

HOT FIREPol® Blend Master Mix & Blend Master Mix Ready To Load

Description

A ready-to-use 5x-concentrated solution for more demanding endpoint PCR assays. In addition to the hot-start Taq polymerase HOT FIREPol® this master mix contains a proofreading enzyme which offers enhanced fidelity and performance. The mix has regular and Ready To Load version and different $MgCl_2$ options for easier optimization. Ready To Load mix includes loading dyes for direct loading to gel.

Benefits

- increased yield, sensitivity and specificity
- up to **5x higher fidelity**
- suitable for templates up to 5 kb
- reduced **primer dimer** formation
- **Ready To Load** mix available
- reaction set-up and shipment **without ice**

Did you know?

Fidelity is the accuracy of the DNA polymerase at incorporating the correct dNTP to the elongating DNA strand.

Researchers already trust Blend Master Mix

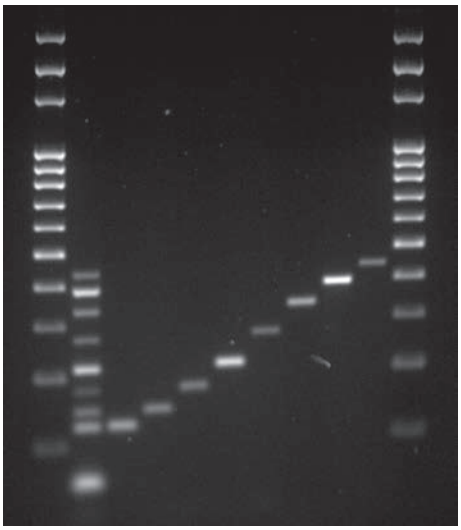
Reference:

> Solis BioDyne has proven to be a great company that has customer-oriented services in molecular work. HOT FIREPol® Blend Master Mix is convenient to use, store and produces high quality results. I know what I am saying because it outperforms same products from other companies.

EMMY CHEPKOECH
PhD student
University of Eldoret, Kenya

CONVENIENT RESULTS IN SINGLE- AND MULTIPLEX REACTIONS

Convenient results in single- and multiplex reactions Excellent amplification in 8-plex (line 1) and single-plex reactions (lines 2-9). Fragments were amplified from human genomic DNA using HOT FIREPol® Blend Master Mix Ready to Load.



Selected publications:

- Fowora, M. A. et al., Microbiol Spectr. (2024)
- Jermsutjarit, P. et al, Sci Rep. (2024)
- Sales, N. G. et al, Environmental DNA. (2024)
- Khogali, R. et al., Front. Cell. Infect. Microbiol. (2024)
- Liepinsh, E et al, Br J Pharmacol. (2024)
- Prepilková, V. et al., Water. (2023)

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	SIZE in ml	READ MORE
HOT FIREPol® Blend Master Mix with 7.5 mM $MgCl_2$	04-27-00S15 (free sample) 04-27-00115 04-27-00115-5 04-27-00115-10 04-27-02015	25 250 1250 2500 5000	0.1 1 5x1 10x1 20	
HOT FIREPol® Blend Master Mix with 10 mM $MgCl_2$	04-27-00S20 (free sample) 04-27-00120 04-27-00120-5 04-27-00120-10 04-27-02020	25 250 1250 2500 5000	0.1 1 5x1 10x1 20	
HOT FIREPol® Blend Master Mix with 12.5 mM $MgCl_2$	04-27-00S25 (free sample) 04-27-00125 04-27-00125-5 04-27-00125-10 04-27-02025	25 250 1250 2500 5000	0.1 1 5x1 10x1 20	

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	SIZE in ml	READ MORE
HOT FIREPol® Blend Master Mix **Ready To Load** with 7.5 mM $MgCl_2$	04-25-00S15 (free sample) 04-25-00115 04-25-00115-5 04-25-00115-10 04-25-02015	25 250 1250 2500 5000	0.1 1 5x1 10x1 20	
HOT FIREPol® Blend Master Mix **Ready To Load** with 10 mM $MgCl_2$	04-25-00S20 (free sample) 04-25-00120 04-25-00120-5 04-25-00120-10 04-25-02020	25 250 1250 2500 5000	0.1 1 5x1 10x1 20	
HOT FIREPol® Blend Master Mix **Ready To Load** with 12.5 mM $MgCl_2$	04-25-00S25 (free sample) 04-25-00125 04-25-00125-5 04-25-00125-10 04-25-02025	25 250 1250 2500 5000	0.1 1 5x1 10x1 20	

HOT FIREPol® GC Master Mix Kit

Description

A ready-to-use 5x-concentrated solution for endpoint PCR assays, optimised for GC-rich templates. It contains a hot-start Taq DNA polymerase HOT FIREPol® and allows amplification of up to 5 kb DNA templates. Separate tubes of 25 mM $MgCl_2$ and an additive for difficult templates (100% DMSO) are supplied with the mix.

Benefits

- excellent amplification with templates up to **79% GC** content
- suitable for templates up to 5 kb
- vials of 100% DMSO and 25 mM $MgCl_2$ enable **flexibility** in reaction optimization
- reaction set-up and shipment **without ice**

Researchers already trust GC Master Mix

Reference:

> **In our lab, GC Master mix gave excellent results with low-abundance, difficult-to-amplify targets. Afterwards, these PCR products were cloned into expression vectors and sequenced - and vast majority of sequences were intact. So the GC Master mix has low mutation rate and is a good cloning tool as well.**

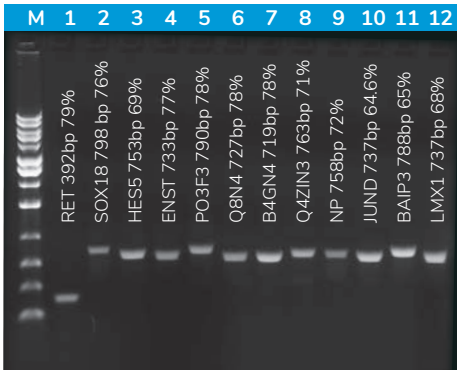
DR ILLAR PATA
IVEX Lab, Estonia

Selected publications:

- Hunter, S. et al., Plant Disease. (2023)
- Tamm, M. et al., Int J Oncol Res. (2022)

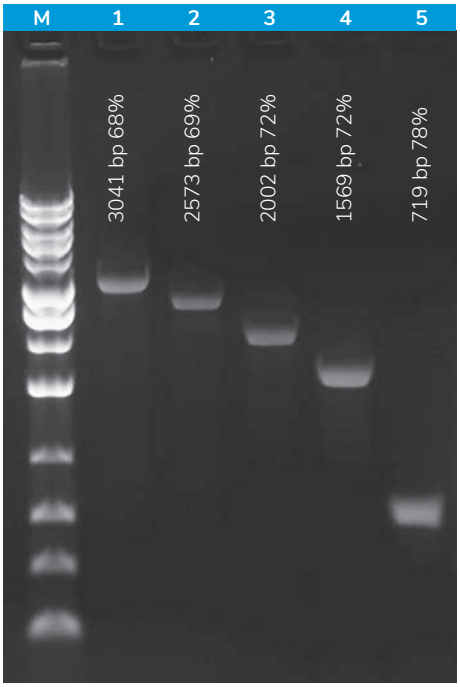
AMPLICONS OF VARIOUS GC-CONTENT

12 GC-rich genes were amplified from human gDNA using HOT FIREPol® GC Master Mix Kit. Final concentration of DNA template and DMSO was 1 ng/µl and 10% respectively. The Master Mix performed well on templates with up to 79% GC content.



AMPLICONS OF VARIOUS LENGTHS FROM GC-RICH TEMPLATE

GC-rich fragments of various length from human gDNA B4GN4 gene were amplified with HOT FIREPol® GC Master Mix Kit. Final concentration of DNA template and DMSO was 1 ng/µl and 10% respectively. The Master Mix performed well with fragments of up to 3000 bp in length.



Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	SIZE in ml	READ MORE
HOT FIREPol® GC Master Mix Kit	04-43-00S15 (free sample) 04-43-00115 04-43-00115-5 04-43-02015	25 250 1250 5000	0.1 1 5x1 20	

Products and samples
can be ordered via **e-mail:** orders@solisbiodyne.com, via **skype:** solis.biodyne, via **phone:** +372 740 9960, or via our **e-shop:** solisbiodyne.com

FIREPol® Master Mix & Master Mix Ready To Load

Description

A ready-to-use 5x-concentrated solution for routine endpoint PCR assays. It contains a thermostable Taq DNA polymerase FIREPol® and allows amplification of up to 5 kb DNA templates. The mix has two versions - regular and Ready To Load mix which includes loading dyes for direct loading to gel.

Benefits

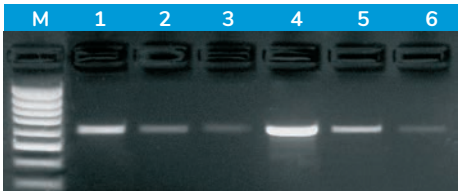
- **all-in-one master mix format** reduces pipetting errors and **saves time**
- suitable for templates up to 5 kb
- **Ready To Load** mix available for direct loading to gel
- reaction set-up and shipment **without ice**

Did you know?

$MgCl_2$ acts as a cofactor and is a catalyzer in PCR reaction. Mg^{2+} ions bind to the catalytic site of the DNA polymerase and catalyze phosphodiester bond formation between the two dNTPs.

PLANT GENOMIC DNA

672 bp fragment was amplified from barley genomic DNA using FIREPol® Master Mix (lane 1-3) and FIREPol® Master Mix Ready To Load (lane 4-6). Template DNA was used at three tenfold dilutions starting from 1 ng/µl. The Master Mixes performed well even at a template concentration as low as 0.01 ng/µl.



Selected publications:

- Maslat, A. O. et al., Heliyon. (2024)
- Kopp, J. et al., Human Genetics. (2024)
- Al-Otaibi, N. M. et al., Antibiotics. (2024)
- Moustapha, L. M. et al., Parasite & Vectors. (2024)
- Aniekwe, O. et al., Parasitology International. (2024)

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	SIZE in ml	READ MORE
FIREPol® Master Mix with 7.5 mM $MgCl_2$	04-11-00S15 (free sample) 04-11-00115 04-11-00115-5 04-11-00115-10	25 250 1250 2500	0.1 1 5x1 10x1	
FIREPol® Master Mix with 12.5 mM $MgCl_2$	04-11-00S25 (free sample) 04-11-00125 04-11-00125-5 04-11-00125-10	25 250 1250 2500	0.1 1 5x1 10x1	
FIREPol® Master Mix Ready To Load with 7.5 mM $MgCl_2$	04-12-00S15 (free sample) 04-12-00115 04-12-00115-5 04-12-00115-10	25 250 1250 2500	0.1 1 5x1 10x1	
FIREPol® Master Mix Ready To Load with 12.5 mM $MgCl_2$	04-12-00S25 (free sample) 04-12-00125 04-12-00125-5 04-12-00125-10	25 250 1250 2500	0.1 1 5x1 10x1	

Products and samples
can be ordered via **e-mail:** orders@solisbiodyne.com, via **skype:** solis.biodyne, via **phone:** +372 740 9960, or via our **e-shop:** solisbiodyne.com

HOT FIREPol®
DNA Polymerase Kit

Description

A chemically modified hot-start version of a thermostable Taq DNA polymerase FIREPol®. This enzyme is activated only after heat treatment at 95°C which prevents any unspecific polymerase activity at lower temperatures during reaction set-up. HOT FIREPol® DNA Polymerase Kit is supplied with 2 reaction buffers, 25 mM $MgCl_2$ and an additive for difficult templates. HOT FIREPol® 10x Buffer B2 contains non-ionic detergent suppressing inhibitory effects of the traces of DNA extraction buffers and enhancing PCR yield and efficiency.

Benefits

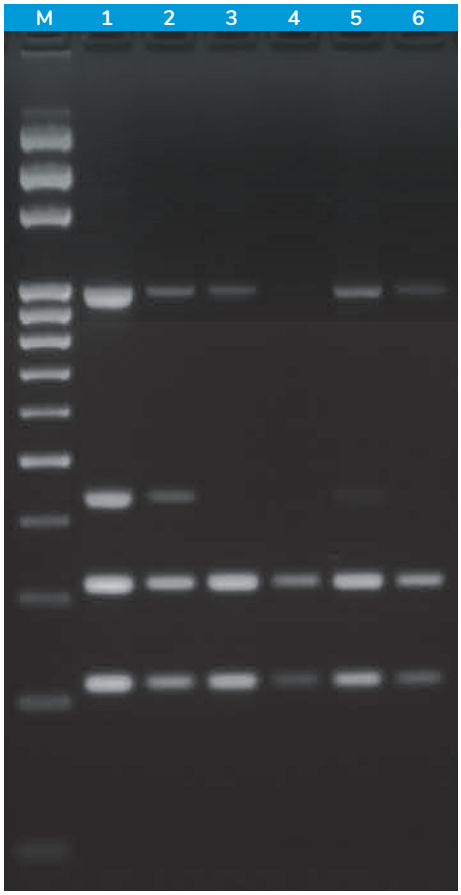
- increased **specificity** and **sensitivity**
- reduced **primer dimer** formation
- suitable for **TA cloning**
- reaction buffer with and without detergent included
- Solution S included in a separate vial for **GC-rich** templates
- **$MgCl_2$** included in a separate vial
- reaction set-up and shipment **without ice**

Did you know?

Our polymerases and master mixes are compatible with a downstream restriction enzyme digest without cleaning up the PCR reaction.

HIGHLY COMPETITIVE

Four fragments from human gDNA were amplified in multiplex reaction using HOT FIREPol® DNA Polymerase Kit (lane 1-2) and two other hot start enzymes from company A (lane 3-4) and company B (lane 5-6). HOT FIREPol® DNA Polymerase performed well with all four fragments in both 10x dilutions.



Researchers already trust HOT FIREPol®

Reference:

> **We had some problems with the implementation of a protocol, we tried for a long time with different enzymes without any positive results. We tested the HOT FIREPol® and it was the perfect troubleshooting, besides the great technical support received from Solis BioDyne.**

DR MARIA JOSE SUAREZ
CIHATA, University of Costa Rica

Selected publications:

- Strompfová, V. et al., Vet Res Commun. (2024)
- de Oliveira, C. H. et al., Microorganisms. (2024)
- Trzebny, A. et al., Parasites & Vectors. (2024)
- Olszyński, R. M. et al., PhytoKeys. (2024)

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	SIZE in U	READ MORE
HOT FIREPol® DNA Polymerase Kit	01-02-KIT-0000S (free sample) 01-02-KIT-00500 01-02-KIT-01000	100 500 1000	

Products and samples
can be ordered via **e-mail:** orders@solisbiodyne.com, via **skype:** solis.biodyne, via **phone:** +372 740 9960, or via our **e-shop:** solisbiodyne.com

FIREPol®
DNA Polymerase Kit

Description

A genetically modified thermostable Taq DNA polymerase that provides robust and reproducible results. FIREPol® DNA Polymerase Kit is supplied with 2 reaction buffers, 25 mM $MgCl_2$ and an additive for difficult templates. FIREPol® 10x Buffer B contains non-ionic detergent suppressing inhibitory effects of the traces of DNA extraction buffer and enhancing PCR yield and efficiency.

Benefits

- robust amplification for **routine applications**
- suitable for templates up to 5 kb
- suitable for **TA cloning**
- reaction buffers with and without detergent included
- Solution S included in a separate vial for **GC-rich** templates
- **$MgCl_2$** included in a separate vial
- reaction set-up and shipment **without ice**

Reference:

> I found that for FIREPol® DNA Polymerase the quality was comparable to similar products even though the price was much cheaper for the Solis product. Therefore, Solis BioDyne are head and shoulders above their competitors when it comes to value for money which is especially important given the funding situation in these straitened times.

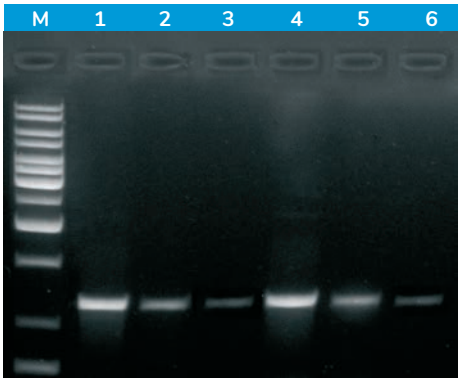
DR. GARY LOUGHRAN
Research Fellow
School of Biochemistry and Cell Biology
University College Cork, Ireland

Tip!

During PCR cycling, keep your primer annealing temperature 2-5°C below the T_m of the primer having the lowest T_m.

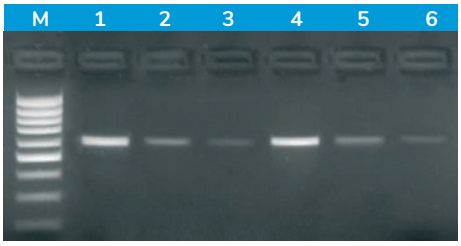
MOUSE GENOMIC DNA

1200 bp fragment of Beta-synuclein gene was amplified from mouse genomic DNA using FIREPol® DNA Polymerase with two different buffers: B (lane 1-3) and BD (lane 4-6). Template DNA was used at three tenfold dilutions starting from 1 ng/µl. FIREPol® DNA Polymerase was used at 0.04 U/µl.



PLANT GENOMIC DNA

672 bp fragment was amplified from barley genomic DNA using FIREPol® DNA Polymerase with two buffers: B (lane 1-3) and BD (lane 4-6). Template DNA was used at three tenfold dilutions starting from 1 ng/µl. The enzyme performed well even at a template concentration as low as 0.01 ng/µl. FIREPol® DNA Polymerase was used at 0.04 U/µl.



Selected publications:

- Ahmed, R. et al., Planta. (2024)
- Cornelius, A. J. et al., J Food Prot. (2024)
- Mulholland, C. V. et al., Nat Microbiol. (2024)

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	SIZE in U	READ MORE
FIREPol® DNA Polymerase Kit (5 U/µl)	01-01-KIT-0000S (free sample) 01-01-KIT-00500 01-01-KIT-01000 01-01-KIT-02000	100 500 1000 2000	

Products and samples
can be ordered via **e-mail:** orders@solisbiodyne.com, via **skype:** solis.biodyne, via **phone:** +372 740 9960, or via our **e-shop:** solisbiodyne.com

qPCR Mixes: Product Selection Guides

Mixes for dye-based qPCR assays

	Speed	Sensitivity	GC-rich performance	dUTP	Visualization dye	Page
SolisFAST® SolisGreen® qPCR Mix	* * *	* *	*			20
HOT FIREPol® SolisGreen® qPCR Mix 2.0	*	* * *	*			21
HOT FIREPol® EvaGreen® qPCR Supermix	*	* *	* * *	●	●	22
HOT FIREPol® EvaGreen® qPCR Mix Plus	*	*	*			23
HOT FIREPol® EvaGreen® HRM Mix	*	* * *	*			24

For Cycler Compatibility, please check qPCR Mix compatibility table for dye-based mixes on page 19.

Mixes for probe-based qPCR assays

	Speed	GC-rich performance	Multiplex qPCR	dUTP	UNG	Page
SolisFAST® Probe qPCR Mix	* * *	*	≤ 5 targets			26-27
SolisFAST® Probe qPCR Mix with UNG	* * *	*	≤ 5 targets	●	●	26-27
HOT FIREPol® Probe Multiplex qPCR Mix	*	* * *	≤ 4 targets	●		28
HOT FIREPol® Probe Universal qPCR Mix	*	* * *	≤ 2 targets	●		29
HOT FIREPol® Probe qPCR Mix Plus	*	*	≤ 2 targets			30
SolisFAST® Lyo-Ready qPCR Kit with UNG	* * *	*	≤ 5 targets	●	●	40

For cycler compatibility, please check qPCR mix compatibility table for probe-based mixes on page 25.

qPCR Mix Compatibility Table: Dye-based qPCR Mixes

ATTENTION!

See the latest information on our website.

	Fast cycling		Standard cycling					HRM	
	SolisFAST® SolisGreen® qPCR Mix (no ROX)	SolisFAST® SolisGreen® qPCR Mix (ROX)	HOT FIREPol® SolisGreen® qPCR Mix 2.0	HOT FIREPol® EvaGreen® qPCR Supermix	HOT FIREPol® EvaGreen® qPCR Mix Plus (no ROX)	HOT FIREPol® EvaGreen® qPCR Mix Plus (ROX)	HOT FIREPol® EvaGreen® qPCR Mix Plus (Capillary)	HOT FIREPol® EvaGreen® HRM Mix (no ROX)	HOT FIREPol® EvaGreen® HRM Mix (ROX)
Applied Biosystems									
5700, 7000, 7300, 7700, 7900HT, 7900HT Fast, StepOne™, StepOnePlus™						●			●
7500, 7500 Fast, ViiA™7, QuantStudio™ 3, 5, 6 Flex, 7 Flex, 12K Flex		●	●	●		●			●
Agilent/Stratagene									
Mx3000P™, Mx3005P™, Mx4000™		●	●	●		●			●
Bio-Rad									
CFX96™, CFX384™	●		●	●	●			●	
iQ™5, MyiQ™, Chromo4™, Opticon®2; MiniOpticon®	●			●	●			●	
Bio Molecular Systems (BMS)									
Mic	●		●	●	●			●	
Eppendorf									
Mastercycler® ep Realplex	●		●	●	●				
Qiagen									
Rotor-Gene® 3000, Rotor-Gene® 6000, Rotor-Gene® Q	●		●	●	●			●	
Thermo Scientific									
PikoReal™	●		●	●	●			●	
Illumina									
The Eco™	●		●	●	●			●	
Roche Applied Science									
LightCycler® 480, LightCycler® Nano, LightCycler® 96	●		●	●	●			●	
LightCycler® 1.x, 2.0							●		
Takara									
Thermal Cycler Dice™ (TP800)	●		●	●	●			●	

SolisFAST® SolisGreen® qPCR Mixes

Description

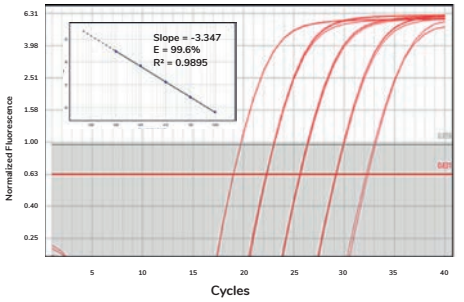
Fast and sensitive ready-to-use 5x-concentrated solution for dye-based qPCR detection of DNA targets using SolisGreen® dsDNA intercalating dye and SYBR®/FAM detection channel. The mix contains a novel SolisFAST® DNA Polymerase with fast hot-start and 2-4 times faster extension rates (15-30 sec/kb) compared to the wild-type Taq DNA polymerase (60 sec/kb), HOT FIREPol® and FIREPol® DNA polymerases. It has two versions to match different instruments. The ROX-mix is compatible with qPCR instruments that require low ROX level for signal normalization. SolisGreen® qPCR mixes are suitable for commercial and diagnostic applications and require no additional licensing.

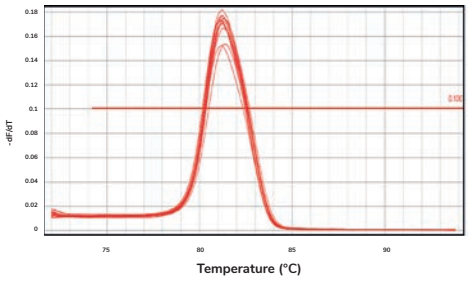
Benefits

- qPCR results **2x faster**
- fast hot-start (30 sec-3 min)
- fast amplification (15-30 sec/kb)
- bright and sensitive **SolisGreen® dye**
- suitable for **commercial** applications
- compatible with most cyclers, except high ROX
- different product versions: no ROX and ROX
- reaction set-up and shipment **without ice**

ACCURATE AND SENSITIVE qPCR

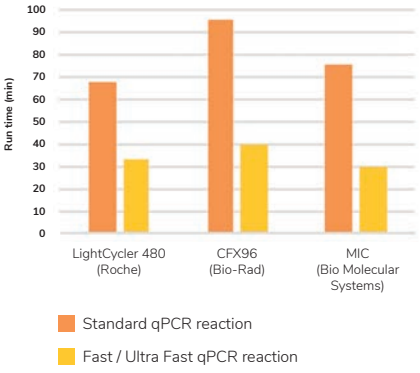
Amplification of a 75 bp fragment of B2M gene using five tenfold dilutions of human cDNA (100 ng – 10 pg with three replicates at each concentration) with SolisFAST® SolisGreen® qPCR Mix. qPCR was performed on a Mic qPCR cycler (Bio Molecular Systems). Thermal conditions: activation 30 sec at 95°C, cycling 5 sec at 95°C, 20 sec at 60°C.





RESULTS IN 30 MINUTES!

Duration of a qPCR run with standard thermal conditions using regular qPCR mix and fast thermal conditions using SolisFAST® SolisGreen® qPCR Mix.



Did you know?

SolisGreen® and EvaGreen® dyes are detected in the same channel as SYBR® Green I. You don't have to change any detection settings on your qPCR cycler.

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	SIZE in ml	READ MORE
SolisFAST® SolisGreen® qPCR Mix (no ROX)	28-41-0000S (free sample) 28-41-00001 28-41-00001-5 28-41-00020	50 250 5 x 250 5000	0.2 1 5 x 1 20	
SolisFAST® SolisGreen® qPCR Mix (ROX)	28-46-0000S (free sample) 28-46-00001 28-46-00001-5 28-46-00020	50 250 5 x 250 5000	0.2 1 5 x 1 20	

Products and samples
can be ordered via **e-mail:** orders@solisbiodyne.com, via **skype:** solis.biodyne, via **phone:** +372 740 9960, or via our **e-shop:** solisbiodyne.com

HOT FIREPol® SolisGreen® qPCR Mix 2.0

Description

HOT FIREPol® SolisGreen® qPCR Mix 2.0 is a solution specially designed for real-time quantitative PCR assay. This product contains all the necessary components, except sample (DNA/RNA template) and primers, to perform reactions with accurate and highly sensitive results. The product includes a passive reference based on ROX dye, making it compatible with both ROX-dependent and ROX-independent qPCR cyclers.

Features

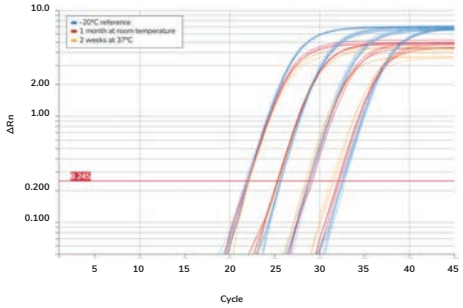
- **Good reproducibility:** high reproducibility is ensured with production of each batch, promoting consistent lot-to-lot results .
- **Reliable:** great amplification results even with low concentrations and low copy-number samples.
- **Easy to use:** just add primers and samples and start the qPCR cycler, reducing training time and user error.
- **Environmentally friendly:** the product contains a specially developed SolisGreen® dye that is environmentally friendly and safe to use. Additionally, the product is exceptionally stable enabling world-wide ice-free shipping!
- **Non-specific amplification prevention:** HOT FIREPol® DNA Polymerase is activated by a 10 min incubation step at 95°C. This prevents the extension of non-specifically annealed primers and primer-dimers formed at low temperatures during qPCR setup.

Clients report

- Exceptional stability!
- Remarkable sensitivity in food pathogen testing

REMARKABLE STABILITY AT HIGHER TEMPERATURES – REDUCING YOUR CO_2 FOOTPRINT BY ENABLING WORLDWIDE ICE-FREE SHIPPING!

Amplification plot showcasing results of stability testing with HOT FIREPol® SolisGreen® qPCR Mix 2.0. Stability testing was carried out with TUBA8 target on four 10-fold dilutions (20 pg to 20 ng) of human gDNA using Quantstudio™ 6 Pro qPCR cycler (Applied Biosystems™). The results demonstrate great sensitivity and reproducibility with high fluorescence levels when tested for 2 weeks at 37°C (yellow), and 1 month at room temperature (25 °C, red) in comparison of a product kept at -20 °C as a reference (blue).



Applications

- Gene expression analysis and absolute quantification
- Pathogen detection and quantification
- Low-copy gene detection
- Cell-free DNA analysis

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	SIZE in ml	READ MORE
HOT FIREPol® SolisGreen® qPCR Mix 2.0	08-47-0000S (free sample) 08-47-00001 08-47-00001-5 08-47-00001-10 08-47-00020	50 250 1250 2500 5000	0.2 1 5x1 10x1 20	

Products and samples
can be ordered via **e-mail:** orders@solisbiodyne.com, via **skype:** solis.biodyne, via **phone:** +372 740 9960, or via our **e-shop:** solisbiodyne.com

HOT FIREPol® EvaGreen® qPCR Supermix

Description

A universal ready-to-use 5x-concentrated solution for dye-based qPCR detection of DNA targets using EvaGreen® dsDNA intercalating dye and SYBR®/FAM detection channel. The mix is optimised for highly specific results and reduced primer-dimer formation with excellent amplification of GC-rich regions. The Mix contains dUTPs to prevent cross-contamination when used with UNG treatment, and a visible dye to ease reaction set-up. It contains an internal reference based on ROX dye and is compatible with most qPCR instruments, including those that require no ROX and low ROX level for signal normalization*.

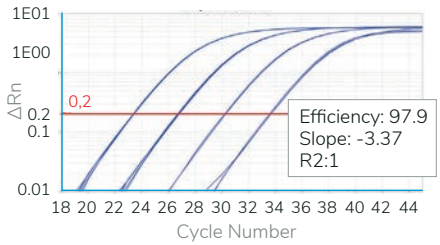
Benefits

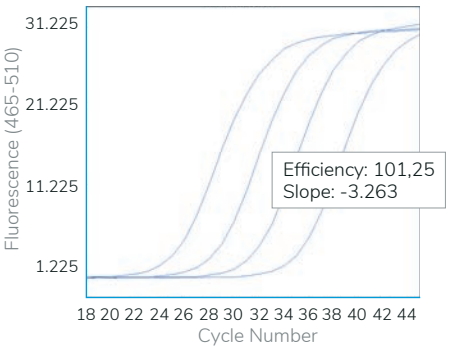
- high sensitivity with **low DNA** concentrations
- robust amplification of **GC-rich** targets
- **blue visualization dye** to ease pipetting
- reduced **primer dimer** formation
- contains **dUTP** to prevent cross-contamination when used in combination with UNG
- one qPCR mix for all cyclers (except capillary)
- reaction set-up and shipment **without ice**

* **IMPORTANT UPDATE!** HOT FIREPol® EvaGreen® qPCR Supermix is not compatible with high ROX cyclers such as Applied BioSystems® StepOne™ or StepOnePlus™.

TRUSTWORTHY PERFORMANCE

Amplification plots of tenfold dilution series for the human GAPDH gene performed on Applied Biosystems™ ViiA™7 (upper graph) and Roche LightCycler® 480 (lower graph). The amount of DNA per reaction ranges from 0.01 to 10 ng. The results show high linear range and high efficiency across a wide range of DNA concentrations on different qPCR platforms.





Did you know?

The average GC-content in human genome ranges from 35% to 60% across 100 kb fragments, with a mean of 46.1%. GC-content above 60% is considered as high GC.

Selected publications:

- Koch, B. et al., Front. Cell. Infect. Microbiol. (2024)
- Thorstenberg, M. L. et al., Biomed J. (2024)
- Fassarella, L. B. et al., Eur J Nutr. (2024)
- Riego, M. L. et al., Sci Rep. (2024)

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	SIZE in ml	READ MORE
HOT FIREPol® EvaGreen® qPCR Supermix	08-36-0000S (free sample) 08-36-00001 08-36-00001-5 08-36-00001-10 08-36-00020	50 250 1250 2500 5000	0.2 1 5x1 10x1 20	

Products and samples
can be ordered via **e-mail:** orders@solisbiodyne.com, via **skype:** solis.biodyne, via **phone:** +372 740 9960, or via our **e-shop:** solisbiodyne.com

HOT FIREPol® EvaGreen® qPCR Mix Plus

Description

A cost-effective ready-to-use 5x-concentrated solution for dye-based qPCR detection of DNA targets using EvaGreen® dsDNA intercalating dye and SYBR®/FAM detection channel. The mix has three versions to match different instruments. The ROX-mix is compatible with qPCR instruments that require low or high ROX level for signal normalization. The capillary-mix is optimised for capillary based systems.

Benefits

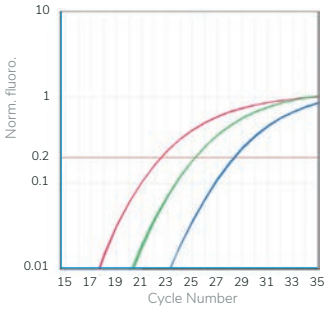
- **cost-effective** solution for less demanding assays
- suitable for most dye-based applications
- high **sensitivity** and **specificity**
- excellent **efficiency**
- compatible with most cyclers
- different product versions: no ROX, ROX, capillary
- reaction set-up and shipment **without ice**

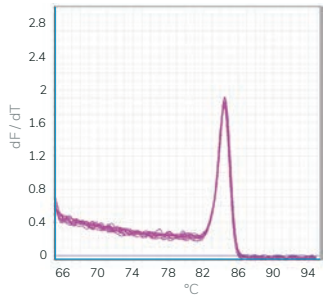
Tip!

Analyze your primers for self-complementarity and stable secondary structures (e.g. hairpins) in their sequences. Avoid the 3'-self complementarity, because it increases possibility of primer-dimers formation.

EXCELLENT SENSITIVITY AND SPECIFICITY

The amplification of a 98 bp fragment of GAPDH gene exhibits sensitive and efficient reaction curves (upper graph) with highly specific peak in melt curve analysis (lower graph) using HOT FIREPol® EvaGreen® qPCR Mix Plus (no ROX). Amplification was performed on human genomic DNA using Rotor-Gene® 6000 qPCR cycler following cycling protocols recommended by the supplier.





Selected publications:

- Bień, J. et al., Histochem Cell Biol. (2024)
- Kgosana, L. P. et al., Vaccines. (2024)
- Ndacyayisenga, J. et al., Informatics in Medicine Unlocked. (2024)

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	SIZE in ml	READ MORE
HOT FIREPol® EvaGreen® qPCR Mix Plus (ROX)	08-24-0000S (free sample) 08-24-00001 08-24-00001-5 08-24-00001-10 08-24-00020	50 250 1250 2500 5000	0.2 1 5x1 10x1 20	
HOT FIREPol® EvaGreen® qPCR Mix Plus (no ROX)	08-25-0000S (free sample) 08-25-00001 08-25-00001-5 08-25-00001-10 08-25-00020	50 250 1250 2500 5000	0.2 1 5x1 10x1 20	
HOT FIREPol® EvaGreen® qPCR Mix Plus (Capillary)	08-26-0000S (free sample) 08-26-00001 08-26-00001-5 08-26-00001-10 08-26-00020	50 250 1250 2500 5000	0.2 1 5x1 10x1 20	

Products and samples
can be ordered via **e-mail:** orders@solisbiodyne.com, via **skype:** solis.biodyne, via **phone:** +372 740 9960, or via our **e-shop:** solisbiodyne.com

HOT FIREPol® EvaGreen® HRM Mix

Description

A ready-to-use 5x-concentrated solution for High Resolution Melt (HRM) analysis of DNA targets using EvaGreen® dsDNA intercalating dye and SYBR®/FAM detection. The mix has two versions to match different instruments. The ROX-mix is compatible with qPCR instruments that require low or high ROX level for signal normalization.

Benefits

- **excellent resolution in HRM assays** allows detection of DNA sequence variations
- contains sensitive **EvaGreen® dye**
- compatible with most cyclers
- different product versions: no ROX, ROX
- reaction set-up and shipment **without ice**

Did you know?

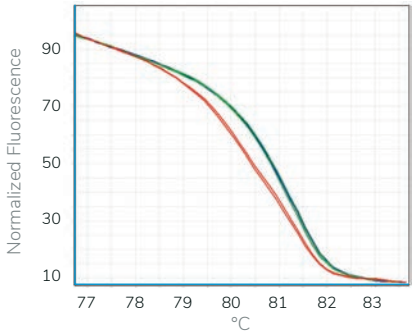
High resolution melt analysis can be used for SNP genotyping, discovering mutations, screening for heterozygosity, analyzing DNA methylation.

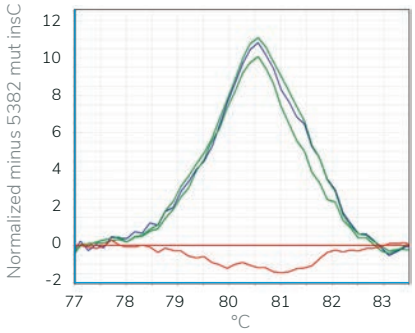
Selected publications:

- Pussadhamma, B. et al., Sci Rep. (2024)
- Ghorbani, M. et al., Cancer Chemother Pharmacol. (2024)
- Makhulu, E. E. et al., mBio. (2024)

SENSITIVE HRM GENOTYPING

High Resolution Melt Analysis was used to genotype a C insertion in BRCA1 gene, a breast cancer susceptibility gene, with HOT FIREPol® EvaGreen® HRM Mix (two graphs below). Reactions were performed on Corbett Rotor-Gene® 6000. Green lines represent wildtypes without an insertion, red lines represent a C insertion and blue line represents a patient with unknown phenotype.





No.	Color	Name	Genotype	Confi. %
37		Unknown phenotype	5382 wt	99.18
40		Wildtype 1	5382 wt	97.33
41		Wildtype 2	5382 wt	100.00
42		Mutation 1	5382 mut insC	100.00
43		Mutation 2	5382 mut insC	97.47

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	SIZE in ml	READ MORE
HOT FIREPol® EvaGreen® HRM Mix (ROX)	08-33-0000S (free sample) 08-33-00001 08-33-00001-5 08-33-00001-10 08-33-00020	50 250 1250 2500 5000	0.2 1 5x1 10x1 20	
HOT FIREPol® EvaGreen® HRM Mix (no ROX)	08-31-0000S (free sample) 08-31-00001 08-31-00001-5 08-31-00001-10 08-31-00020	50 250 1250 2500 5000	0.2 1 5x1 10x1 20	

Products and samples
can be ordered via **e-mail:** orders@solisbiodyne.com, via **skype:** solis.biodyne, via **phone:** +372 740 9960, or via our **e-shop:** solisbiodyne.com

qPCR Mix Compatibility Table: Probe-based qPCR Mixes

	Fast cycling				Standard cycling							
	SolisFAST® Probe qPCR Mix (no ROX)	SolisFAST® Probe qPCR Mix with UNG (no ROX)	SolisFAST® Probe qPCR Mix (ROX)*	SolisFAST® Probe qPCR Mix with UNG (ROX)*	HOT FIREPol® Multiplex qPCR Mix (no ROX)	HOT FIREPol® Multiplex qPCR Mix (ROX)*	HOT FIREPol® Multiplex qPCR Mix (Purple)**	HOT FIREPol® Probe Universal qPCR Kit	HOT FIREPol® Probe qPCR Mix Plus (no ROX)	HOT FIREPol® Probe qPCR Mix Plus (ROX)*	HOT FIREPol® Probe qPCR Mix Plus (Capillary)	SolisFAST® Lyo-Ready qPCR Kit with UNG
Applied Biosystems												
5700, 7000, 7300, 7700, 7900HT, 7900HT Fast, StepOne™, StepOnePlus™			●			●		●		●		
7500, 7500 Fast, ViiA™7, QuantStudio™ 3**, 5, 6 Flex, 7 Flex, 12K Flex			●			●	●	●		●		
Agilent/Stratagene												
Mx3000P™, Mx3005P™, Mx4000™			●			●		●		●		
Bio-Rad												
CFX96™, CFX384™	●				●			●	●			●
iQ™5, MyiQ™, Chromo4™, Opticon®2; MiniOpticon®	●				●			●	●			●
Bio Molecular Systems (BMS)												
Mic	●				●			●	●			●
Eppendorf												
Mastercycler® ep Realplex	●				●			●	●			●
Qiagen												
Rotor-Gene® 3000, Rotor-Gene® 6000, Rotor-Gene® Q	●				●			●	●			●
Thermo Scientific												
PikoReal™	●				●			●	●			●
Illumina												
The Eco™	●				●			●	●			●
Roche Applied Science												
LightCycler® 480, LightCycler® Nano, LightCycler® 96	●				●			●	●			●
LightCycler® 1.x, 2.0											●	
Takara												
Thermal Cycler Dice™ (TP800)	●				●			●	●			●

SolisFAST® Probe qPCR Mixes with Purple reference dye available upon request.
* Mixes that contain ROX can not be used with ROX, JUN and Texas Red labelled probes.
** Mixes with Purple reference dye are not compatible with Applied Biosystems QuantStudio™ 3

SolisFAST® Probe qPCR Mixes

Description

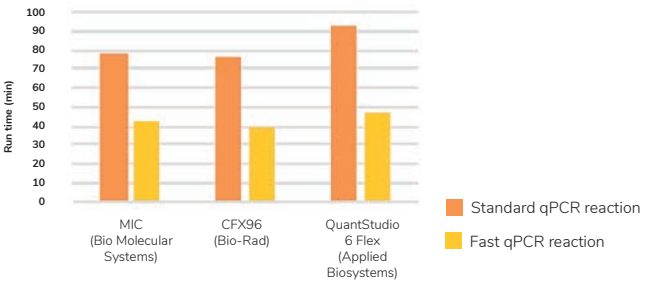
Fast and sensitive ready-to-use 5x-concentrated solution for probe-based qPCR detection of DNA targets using TaqMan® and other hydrolysis probe types. The mix contains a novel SolisFAST® DNA Polymerase with fast hot-start and 2-4 times faster extension rates (15-30 sec/kb) compared to the wild-type Taq DNA polymerase (60 sec/kb), HOT FIREPol® and FIREPol® DNA polymerases, and is optimised for sensitive detection of up to 5 targets in one reaction. It has three versions to match different instruments and assay requirements. ROX-mix is compatible with qPCR instruments that require low and high ROX level for signal normalization, Purple-mix is compatible with instruments that use Mustang Purple™ for signal normalisation. dUTP and UNG containing mixes are available to prevent carry-over contamination.

Benefits

- qPCR results **2x faster**
- fast hot-start (30 sec-3 min)
- fast amplification (15-30 sec/kb)
- tolerant to common inhibitors, comparable with inhibitor tolerant mixes on the market
- analyze **1-5 targets** in 1 reaction
- mix with **dUTP and UNG** available to prevent carry-over contamination
- compatible with most cyclers
- different product versions: no ROX, ROX, Purple
- reaction set-up and shipment **without ice**

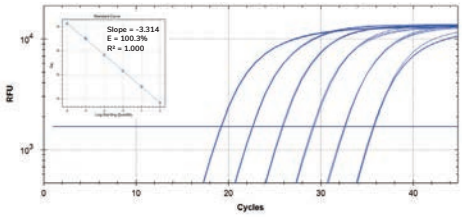
Did you know?

You can avoid carry-over contamination using our UNG Mixes containing dUTPs and UNG enzyme



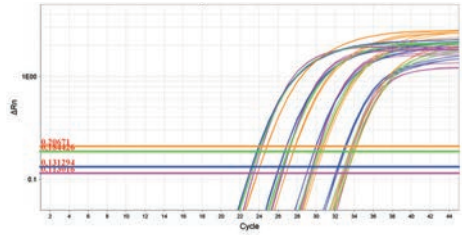
ACCURATE AND SENSITIVE qPCR

Amplification of a 101 bp fragment of *PPIA* gene using six tenfold dilutions of human cDNA (100 ng – 1 pg, three replicates at each concentration). qPCR was performed on a CFX96™ qPCR cycler (Bio-Rad) using SolisFAST® Probe qPCR Mix (no ROX), with detection in FAM channel. Thermal conditions: activation 30 sec at 95°C, cycling 2 sec at 95°C, 10 sec at 60°C.



EXCELLENT FOR MULTIPLEX ASSAYS

Four-plex qPCR amplification with four tenfold serial dilutions of human gDNA (40 ng – 40 pg, three replicates at each concentration). qPCR was performed on a QuantStudio™ 6 Flex qPCR cycler (Applied BioSystems™) with SolisFAST® Probe qPCR Mix (ROX) using ROX dye for normalization. Thermal conditions: activation 3 min at 95°C, cycling 5 sec at 95°C, 20 sec at 60°C.



Selected publications:

- Patibandla, C. et al., Redox Biology. (2024)
- Tokłowicz, M. et al., Biomed Pharmacother. (2023)

2X LESS TIME FROM SAMPLE TO RESULTS

Duration of a 40-cycle qPCR run with standard thermal conditions using regular qPCR mix (initial activation 10-12 min; denaturation 15 sec, annealing/extension 40-60 sec) and fast thermal conditions using SolisFAST® Probe qPCR Master Mix (initial activation 2-3 min; denaturation 2-5 sec, annealing extension 10-20 sec). Amplifications were performed on human gDNA.

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	SIZE in ml	READ MORE
SolisFAST® Probe qPCR Mix (no ROX)	28-01-0000S (free sample) 28-01-00001 28-01-00001-5 28-01-00020	50 250 5 x 250 5000	0.1 1 5 x 1 20	
SolisFAST® Probe qPCR Mix (ROX)	28-02-0000S (free sample) 28-02-00001 28-02-00001-5 28-02-00020	50 250 5 x 250 5000	0.1 1 5 x 1 20	
SolisFAST® Probe qPCR Mix (Purple)	28-03-0000S (free sample) 28-03-00001 28-03-00001-5 28-03-00020	50 250 5 x 250 5000	0.1 1 5 x 1 20	
SolisFAST® Probe qPCR Mix with UNG (no ROX)	28-21-0000S (free sample) 28-21-00001 28-21-00001-5 28-21-00020	50 250 5 x 250 5000	0.1 1 5 x 1 20	
SolisFAST® Probe qPCR Mix with UNG (ROX)	28-22-0000S (free sample) 28-22-00001 28-22-00001-5 28-22-00020	50 250 5 x 250 5000	0.1 1 5 x 1 20	
SolisFAST® Probe qPCR Mix with UNG (Purple)	28-23-0000S (free sample) 28-23-00001 28-23-00001-5 28-23-00020	50 250 5 x 250 5000	0.1 1 5 x 1 20	

HOT FIREPol® Multiplex qPCR Mix

Description

A ready-to-use 5x-concentrated solution for probe-based qPCR detection of DNA targets using TaqMan® and other hydrolysis probe types. The mix is optimised for sensitive detection of up to 4 targets in one reaction with enhanced amplification of GC-rich regions. It contains dUTPs to prevent carry-over contamination when used with UNG treatment, and has three versions to match different instruments and assay requirements. ROX-mix is compatible with most qPCR instruments, including those that require low and high ROX level for signal normalization, Purple-mix is compatible with instruments that use Mustang Purple™ for signal normalisation.

Benefits

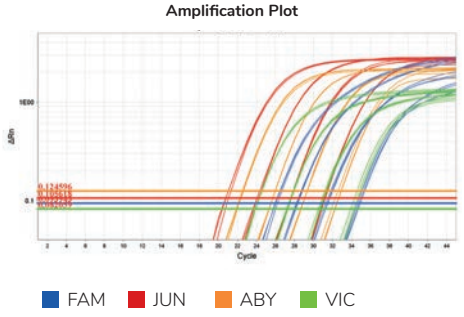
- analyze **1-4 targets** in 1 reaction
- high **specificity** and **sensitivity**
- robust amplification of **GC-rich** targets
- contains **dUTP** to prevent carry-over contamination when used in combination with UNG
- compatible with most cyclers (see table on page 24)
- different product versions: no ROX, ROX, Purple
- reaction set-up and shipment **without ice**

Tip!

Test the performance of primer–probe sets in individual assays before combining them in a multiplex assay.

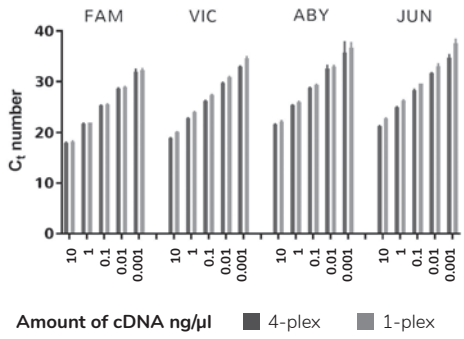
EXCELLENT FOR 4-PLEX ASSAYS

HOT FIREPol® Multiplex qPCR Mix (Purple) was used in 4-plex qPCR amplification with 4 tenfold serial dilutions of human gDNA (gDNA concentration in a reaction ranges from 10 ng/µl to 0.01 ng/µl). Reactions were performed with Applied BioSystems™ QuantStudio™ 6 Flex cycler using Purple dye for normalization.



SAME LEVEL OF SENSITIVITY WITH MULTIPLEXING

HOT FIREPol® Multiplex qPCR Mix (Purple) was used in 4-plex or 1-plex qPCR amplification with 5 tenfold serial dilutions of human cDNA (cDNA concentration in a reaction ranges from 10 ng/µl to 0.001 ng/µl). Reactions were performed with Applied BioSystems™ QuantStudio™ 6 Flex cycler using Purple dye for normalization. The results show virtually identical Ct values for the multiplex and singleplex reactions across a wide template concentration range.



Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	SIZE in ml	READ MORE
HOT FIREPol® Multiplex qPCR Mix	08-01-0000S (free sample) 08-01-00001 08-01-00001-5 08-01-00001-10 08-01-00020	50 250 1250 2500 5000	0.2 1 5x1 10x1 20	
HOT FIREPol® Multiplex qPCR Mix (ROX)*	08-02-0000S (free sample) 08-02-00001 08-02-00001-5 08-02-00001-10 08-02-00020	50 250 1250 2500 5000	0.2 1 5x1 10x1 20	
HOT FIREPol® Multiplex qPCR Mix (Purple)*	08-03-0000S (free sample) 08-03-00001 08-03-00001-5 08-03-00001-10 08-03-00020	50 250 1250 2500 5000	0.2 1 5x1 10x1 20	

* See the passive reference dye and probe reporter dye compatibility table on page 34.

Products and samples
can be ordered via **e-mail:** orders@solisbiodyne.com, via **skype:** solis.biodyne, via **phone:** +372 740 9960, or via our **e-shop:** solisbiodyne.com

HOT FIREPol® Probe Universal qPCR Kit

Description

A universal ready-to-use 5x reaction mix for probe-based qPCR detection of DNA targets using TaqMan® and other hydrolysis probe types. The mix is optimised for sensitive detection of up to 2 targets in one reaction with excellent amplification of GC-rich regions. The mix contains dUTPs to prevent carry-over contamination when used with UNG treatment, and an internal reference based on ROX dye and is compatible with most qPCR instruments, including those that require low and high ROX level for signal normalization. The mix is not compatible with Probes detected in ROX/JUN/Texas Red channel.

Benefits

- suitable for assays with **1-2 targets**
- high **specificity** and **sensitivity**
- superior results with templates with up to **75% GC** content
- contains **dUTP** to prevent cross-contamination when used with UNG
- one qPCR mix for all cyclers (except capillary)
- reaction set-up and shipment **without ice**

Reference:

> **We use Solis products in all our research groups. The most used product is HOT FIREpol® Probe Universal qPCR mix. The product is very efficient and economic, offering the best cost benefit of the market. The fact their products are stable for 30 days at room temperature is another fantastic feature.**

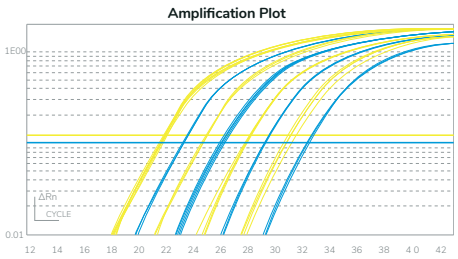
LAÍS MOREIRA GRANATO PHD
Post-Doc
Centro de Citricultura Sylvio Moreira, Brazil
Supplied by Sinapse Biotecnologia

Selected publications:

- Azevedo, B. T. et al., Vet Parasitol. (2024)
- Dos Santos, P. R. M. et al., Biochem Genet. (2024)
- Schlotterose, L. et al., Int J Mol Sci. (2024)

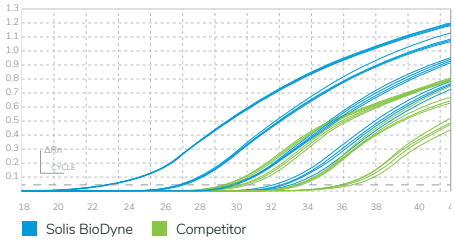
qPCR PERFORMANCE IN A DUPLEX REACTION:

Two fragments from human gDNA were amplified in duplex reaction using HOT FIREPol® Probe Universal qPCR Mix. Excellent results were obtained from four 10x dilutions (starting from 10 ng/µl). BAIP3 (blue) with GC-content 70.3% and efficiency 100% and GAPDH (yellow) with GC-content 56.1% and efficiency 98.4%. Reactions were performed on Applied Biosystems ViiA™ 7 Real-Time PCR System.



HIGHLY COMPETITIVE qPCR MIX:

Four 10x dilutions of 197 bp long fragment of B4G4 gene with GC-content 75.6% were ampified from human gDNA using HOT FIREPol® Probe Universal qPCR Mix (blue) and qPCR Mix from another vendor (green). Reactions were performed on Applied Biosystems ViiA™ 7 Real-Time PCR System following cycling protocol recommended by each supplier.



Tip!

Probe-based qPCR is recommended over a dye-based approach when specificity is especially important.

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	SIZE in ml	READ MORE
HOT FIREPol® Probe Universal qPCR Kit	08-88-0000S (free sample) 08-88-00001 08-88-00001-5 08-88-00020	50 250 1250 5000	0.2 1 5x1 20	

Products and samples
can be ordered via **e-mail:** orders@solisbiodyne.com, via **skype:** solis.biodyne, via **phone:** +372 740 9960, or via our **e-shop:** solisbiodyne.com

HOT FIREPol® Probe qPCR Mix Plus

Description

A cost-effective ready-to-use 5x-concentrated solution for probe-based qPCR detection of DNA targets using TaqMan® and other hydrolysis probe types. The mix is optimised for sensitive detection of up to 2 targets in one reaction. It has three versions to match different instruments. ROX-mix is compatible with qPCR instruments that require low or high ROX level for signal normalization. Capillary-mix is optimised for capillary based systems.

Benefits

- **cost-effective** solution for less demanding assays
- suitable for assays with **1-2 targets**
- high **specificity** and **sensitivity**
- compatible with most cyclers
- different product versions: no ROX, ROX, capillary
- reaction set-up and shipment **without ice**

Tip!

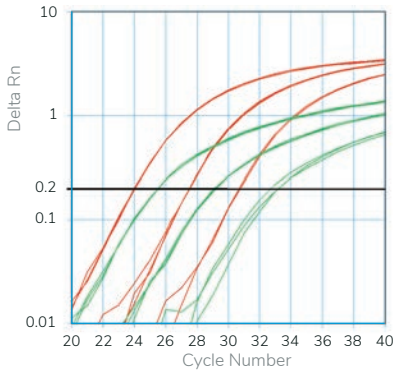
Melting temperature (T_m) of the probe should be 6 – 8°C higher than the T_m of the primers.

Selected publications:

- Vagnerová, K. et al., Front. Immunol. (2024)
- Skerenova, M. et al., Adv Med Sci. (2024)
- Kiive, E. et al., Neuropsychobiology. (2024)

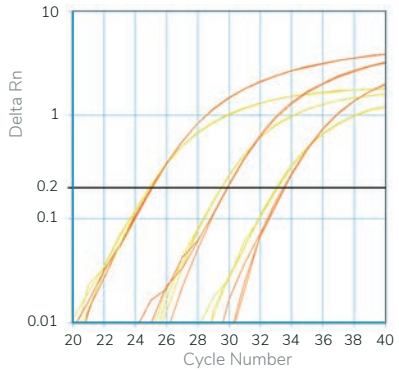
HIGHLY COMPETITIVE

Three tenfold dilutions of 72 bp fragment of albumin gene were amplified from human genomic DNA using HOT FIREPol® Probe qPCR Mix Plus (red) and a qPCR mix from Company A (green). Reactions were performed on Applied Biosystems 7900HT Real-Time PCR System following cycling protocols recommended by the supplier.



qPCR PERFORMANCE IN A DUPLEX REACTION

Amplification of FAM labelled target SNAI1 (orange) and VIC labelled reference gene HPRT (yellow) was performed in a single reaction using HOT FIREPol® Probe qPCR Mix Plus. This multiplex qPCR was carried out on three tenfold dilutions of human placental cDNA on Applied Biosystems 7900HT Real-Time PCR System.



Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	SIZE in ml	READ MORE
HOT FIREPol® Probe qPCR Mix Plus (ROX)	08-14-0000S (free sample) 08-14-00001 08-14-00001-5 08-14-00001-10 08-14-00020	50 250 1250 2500 5000	0.2 1 5x1 10x1 20	
HOT FIREPol® Probe qPCR Mix Plus (no ROX)	08-15-0000S (free sample) 08-15-00001 08-15-00001-5 08-15-00001-10 08-15-00020	50 250 1250 2500 5000	0.2 1 5x1 10x1 20	
HOT FIREPol® Probe qPCR Mix Plus (Capillary)	08-16-0000S (free sample) 08-16-00001 08-16-00001-5 08-16-00001-10 08-16-00020	50 250 1250 2500 5000	0.2 1 5x1 10x1 20	

Products and samples
can be ordered via **e-mail:** orders@solisbiodyne.com, via **skype:** solis.biodyne, via **phone:** +372 740 9960, or via our **e-shop:** solisbiodyne.com

FIREScript® Reverse Transcriptase

Description

FIREScript® is an improved version of Murine Moloney Leukemia Virus (M-MLV) reverse transcriptase (RT) with exceptional stability at room temperature, increased thermostability, substantially faster synthesis rates and higher sensitivity compared to the wild-type M-MLV RT. FIREScript® is used for first strand cDNA synthesis from total RNA or purified mRNA and is working at wide range of reaction temperatures.

Benefits

- stable at room temperature for **30 days**
- works at temperature **37-60°C**
- cDNA synthesis completed in **15 minutes**
- detecting total RNA amounts from **0.01 ng**
- generates full length cDNA of at least **8 kb**
- full **RNase H** activity
- available in **convenient mix** and **flexible kit** formats
- reaction set-up and shipment **without ice**

Did you know?

A higher reaction temperature during reverse transcription denatures complicated RNA secondary structures, which results in higher yields of full length cDNA.

Researchers already trust FIREScript®

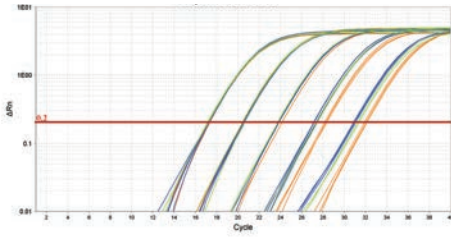
Reference:

> I used the FIREScript® RT cDNA Synthesis Kit. The reverse transcription was done with 1 µg RNA to be transcript, 5 µM random primers, 500 µM dNTPs (mix). Synthesis was done following recommended quick protocol. My results were very good and I will replace my current product with FIREScript® in the future.

VALERIE
Research technician
University of Basel, Switzerland
Supplied by LucernaChem AG

HIGHLY COMPETITIVE ENZYME

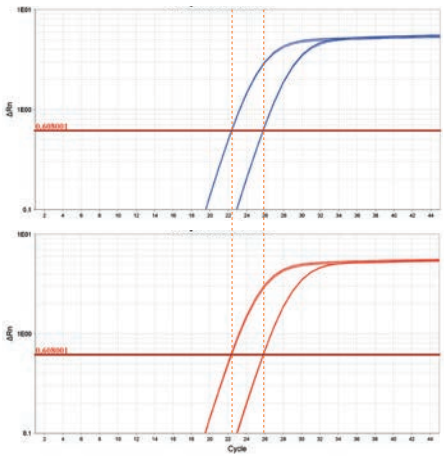
cDNA was synthesized with five tenfold human RNA dilutions using FIREScript® (blue) and cDNA synthesis kits from competitor A (green) and competitor S3 (orange). Downstream qPCR reactions were performed with HOT FIREPol® qPCR Supermix using B2M primers on an Applied BioSystems™ QuantStudio™ 6 Flex.



Solis BioDyne FIREScript® | Comp. A | Comp. S3

EXCEPTIONAL STABILITY

Two tenfold RNA dilutions were reverse transcribed to cDNA using FIREScript® RT that had been stored at -20°C (blue upper graph) and FIREScript® RT that had been stored at room temperature for 4 weeks (red lower graph). Downstream qPCR reactions were performed using HOT FIREPol® EvaGreen® Supermix. The results are equal for both storage conditions.



Solis BioDyne FIREScript® -20°C
Solis BioDyne FIREScript® room temperature

Selected publications:

- Khan, Z. A. et al., Physiological and Molecular Plant Pathology. (2024)
- Shen., H.-T. et al., Biomolecules (2024)
- Kafi, S. et al., Electronic Journal of Biotechnology. (2024)
- El Osmani, N. et al., Epigenetics. (2024)

Send your sample request to orders@solisbiodyne.com

PRODUCT	KIT COMPONENTS	CAT. NO.	RXN/20 µl	READ MORE
FIREScript® RT cDNA synthesis MIX*	• FIREScript® enzyme mix (incl. RiboGrip™ RNase inhibitor) • 10x RT Reaction Premix without primers • 10x RT Reaction Premix with oligo (dT) • 10x RT Reaction Premix with random primers • 10x RT Reaction Premix with oligo (dT) and random primers • Water, nuclease free	06-16-0000S (free sample)	20	
FIREScript® RT cDNA synthesis MIX with Oligo (dT) and Random primers	• FIREScript® enzyme mix (incl. RiboGrip™ RNase inhibitor) • 10x RT Reaction Premix with oligo (dT) and random primers (incl. dNTPs) • Water, nuclease free	06-20-00100 06-20-00500	100 500	
FIREScript® RT cDNA synthesis MIX with Oligo (dT) primer	• FIREScript® enzyme mix (incl. RiboGrip™ RNase inhibitor) • 10x RT Reaction Premix with oligo (dT) (incl. dNTPs) • Water, nuclease free	06-18-00100 06-18-00500	100 500	
FIREScript® RT cDNA synthesis MIX with Random primers	• FIREScript® enzyme mix (incl. RiboGrip™ RNase inhibitor) • 10x RT Reaction Premix with random primers (incl. dNTPs) • Water, nuclease free	06-19-00100 06-19-00500	100 500	
FIREScript® RT cDNA synthesis MIX without primers**	• FIREScript® enzyme mix (incl. RiboGrip™ RNase inhibitor) • 10x RT Reaction Premix without primers (incl. dNTPs) • Water, nuclease free	06-17-00100 06-17-00500	100 500	
FIREScript® RT cDNA synthesis KIT**	• FIREScript® Reverse Transcriptase (200 U/µl) • RiboGrip™ RNase inhibitor (40 U/µl) • 10x RT Reaction Buffer with DTT • dNTP MIX (20 mM of each) • Oligo (dT) Primer (100 µM) • Random Primers (100 µM) • Water, nuclease free	06-15-0000S (free sample) 06-15-00050 06-15-00200	20 50 200	
FIREScript® KIT**	• FIREScript® Reverse Transcriptase (200 U/µl) • 10x RT Reaction Buffer with DTT	06-13-0000S (free sample) 06-13-00050 06-13-00200	20 50 200	

* The sample includes all 4 priming options. Gene-specific primers to be supplied by the user.
** Similar products with SOLIScript® Reverse Transcriptase available upon request.

RiboGrip® RNase Inhibitor (220U/µl)

Description

RiboGrip® RNase inhibitor (220 U/µl) is a unique chimeric protein of mammalian origin, expressed in *E. coli* and purified according to state-of-the-art protein purification methods. RiboGrip® inhibits the activity of ribonucleases, by forming a strong noncovalent bond in a non-competitive mode at a 1:1 ratio. It is primarily used to prevent RNA degradation by contaminating RNases in various assays that use RNA sample materials, such as first-strand cDNA synthesis, RT-(q)PCR, RT-LAMP, etc.

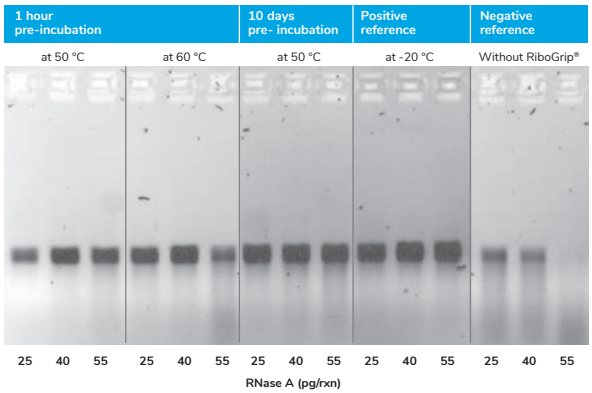
RiboGrip® also includes a genetic modification - **Stability TAG** - Solis BioDyne's proprietary and patented polypeptide stabilization technology. Stability TAG makes RiboGrip® **extremely tolerant to higher temperatures**, and enables room temperature shipping as well as effective use in assays requiring high incubation temperatures.

Applications

- First-strand cDNA synthesis
- RT-PCR, RT-qPCR and RT-LAMP
- In vitro transcription and translation
- RNA isolation and purification
- RNA sequencing

Features

- **Exceptional stability** due to our patented Stability TAG technology – tolerates up to 60 minutes at 60 °C or 1 month at room temperature (25 °C)
- **Unique high concentration formulation (220 U/µl)** allows flexible assay design
- **Efficient protection of RNA** at low DTT concentrations
- **Strong inhibition** of eukaryotic RNases, including **RNase A, B, and C**
- **Compatibility** with reverse transcriptases, *Taq* and *Bsm* Polymerase.
- **Glycerol free** formulations available



STRESS TESTS WITH RIBOGRIP® SHOW GREAT TOLERANCE TO HIGH TEMPERATURES

Illustrates the impact of RiboGrip® on the inhibition of RNase A-mediated cleavage of synthetic RNA. To assess its efficacy under different conditions, RiboGrip® was subjected to incubation at 50 °C or 60 °C for 1 hour, as well as at 50 °C for an extended period of 10 days (with a control sample stored at -20 °C). Subsequently, RiboGrip® stored under each respective stress condition was employed in an assay involving RNase A (at concentrations of 25, 40, and 55 pg/rxn, with a total reaction volume of 12 µl) and transcribed RNA (RNA 2 II, GAPDH, approximately 3000 bp). The reaction mixture was incubated in the reaction buffer at 32 °C for 60 minutes. The resulting cleavage of RNA was effectively inhibited by RiboGrip®, and the outcomes were visualized through electrophoresis on a 0.9% TBE gel.

Send your sample request to info@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	READ MORE
RiboGrip® RNase Inhibitor (220 U/µl)	06-26-0000S (free sample) 06-26-4000U 06-26-010kU	100 200 500	
RiboGrip® Glycerol-Free RNase Inhibitor (220 U/µl)	06-29-0000S (free sample) 06-29-4000U 06-29-010kU	100 200 500	

Products and samples
can be ordered via **e-mail:** info@solisbiodyne.com, via **skype:** solis.biodyne, via **phone:** +372 740 9960, or via our **e-shop:** solisbiodyne.com

Product Selection Guide: One-step RT-qPCR

		No. of targets per reaction	GC-rich templates	dUTPs UNG	Passive reference dye	Compatible cyclers	Incompatible probe reporter dyes	Page
Dye-based detection	**SOLIScript® 1-step SolisGreen® Kit 2.0**	1	*		ROX	no ROX and low-ROX cyclers		35
Probe-based detection	**SOLIScript® Fast 1-step RT-qPCR Mix with UNG[a]**	1-5	**	dUTPs UNG	None	All cyclers	None	36
	SOLIScript® 1-step Multiplex Probe Kit	1-4	***	dUTPs	None	All cyclers except Applied BioSystems™ and Agilent	None	37
	SOLIScript® 1-step Multiplex Probe Kit (ROX)	1-4	***	dUTPs	ROX	Applied BioSystems™ and Agilent cyclers	ROX JUN Texas Red	37
	SOLIScript® 1-step Multiplex Probe Kit (Purple)	1-4	***	dUTPs	Purple	Applied BioSystems™ cyclers with Mustang Purple™ channel	Cy5	37
	SOLIScript® 1-step Probe Kit	1-2	*	dUTPs	ROX	All cyclers	ROX JUN Texas Red	38

[a] A ROX-containing Kit is available upon request if signal normalisation is required on Applied BioSystems™ or Agilent cyclers.

SOLIScript® 1-step SolisGreen® Kit 2.0

Description

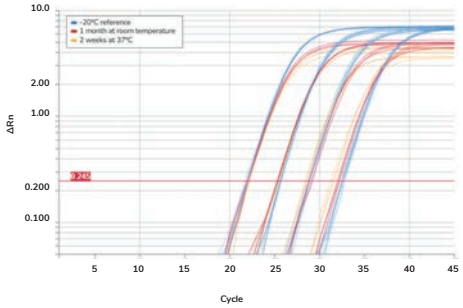
SOLIScript® 1-step SolisGreen® Kit 2.0 is a solution specially designed for one-step RT-PCR (RT-qPCR) assays. This product contains all the necessary components, except sample (DNA/RNA template) and primers, to perform reactions with accurate and highly sensitive results. The product includes a passive reference based on ROX dye making it compatible with both ROX-dependent and ROX-independent qPCR cyclers.

Features

- **Good reproducibility:** high reproducibility is ensured with production of each batch, promoting consistent lot-to-lot results .
- **Reliable:** great amplification results even with low concentrations and low copy-number samples.
- **Easy to use:** just add primers and samples and start the qPCR cycler, reducing training time and user error.
- **Environmentally friendly:** the product contains a specially developed SolisGreen® dye that is environmentally friendly and safe to use. Additionally, the product is exceptionally stable enabling world-wide ice-free shipping!
- **Non-specific amplification prevention:** HOT FIREPol® DNA Polymerase is activated by a 10 min incubation step at 95°C. This prevents the extension of non-specifically annealed primers and primer-dimers formed at low temperatures during qPCR setup.

REMARKABLE STABILITY AT HIGHER TEMPERATURES – REDUCING YOUR CO_2 FOOTPRINT BY ENABLING WORLDWIDE ICE-FREE SHIPPING!

Amplification plot showcasing results of stability testing with HOT FIREPol® SolisGreen® qPCR Mix 2.0. Stability testing was carried out with TUBA8 target on four 10-fold dilutions (20 pg to 20 ng) of human gDNA using Quantstudio™ 6 Pro qPCR cycler (Applied Biosystems™). The results demonstrate great sensitivity and reproducibility with high fluorescence levels when tested for 2 weeks at 37°C (yellow), and 1 month at room temperature (25 °C, red) in comparison of a product kept at -20 °C as a reference (blue).



Applications

- Gene expression analysis and absolute quantification
- Pathogen detection and quantification
- Low-copy gene detection

Clients report

- Exceptional stability!
- Remarkable sensitivity in food pathogen testing

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	READ MORE
SOLIScript® 1-step SolisGreen® Kit 2.0	08-91-0000S (sample) 08-91-00250	50 250	

Products and samples
can be ordered via **e-mail:** orders@solisbiodyne.com, via **skype:** solis.biodyne, via **phone:** +372 740 9960, or via our **e-shop:** solisbiodyne.com

SOLIScript® Fast 1-step RT-qPCR Mix with UNG

Description

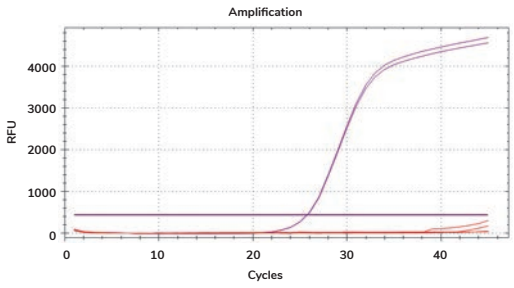
SOLIScript® Fast 1-step RT-qPCR Mix with UNG is optimized for probe-based one-step RT-qPCR assays. It contains all necessary components in a convenient one tube format (except template and primers/probes) to perform cDNA synthesis and qPCR with up to 5-targets in approximately one hour of total reaction time. It also contains the **RNase Inhibitor RiboGrip™** to protect RNA from degradation. Inhibitor tolerance and compatibility with fast cycling allow flexible experiment design. The mix includes Salini UNG™ Uracil-N-Glycosylase and dUTPs that effectively prevent carryover contamination and false positive results.

Benefits

- Sensitive **5-plex** detection
- Convenient **1-tube** format
- UNG prevents carryover contamination
- **Fast cycling**
- Tolerant to common PCR inhibitors

Prevent carryover contamination

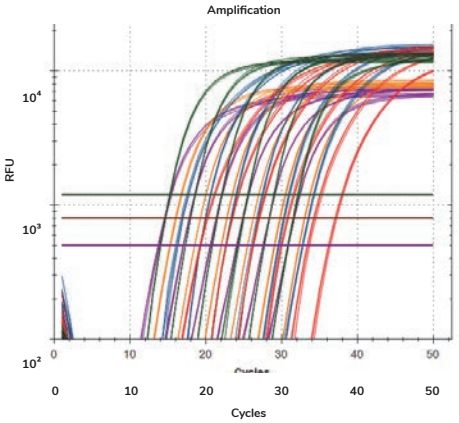
RT-qPCR reactions with two formulations, SOLIScript® Fast 1-step RT-qPCR Mix with UNG and a version without UNG were spiked with equal concentration of dU-containing amplicons, mimicking **carryover contamination**. While the reagent without UNG generated a regular amplification curve (purple curve), **SOLIScript® Fast 1-step RT-qPCR Mix with UNG degraded the dU-containing amplicons** (red curve), resulting in no amplification from the mimicking carryover contamination.



No UNG SOLIScript® Fast 1-step RT-qPCR Mix with UNG

EFFORTLESS 5-PLEX AMPLIFICATION

Five-plex RT-qPCR reactions (FAM, blue; HEX, green; ROX, red; Cy5, puprle; Cy5.5, orange) using the SOLIScript® Fast 1-step RT-qPCR Mix with UNG on Bio-Rad CFX96 platform with six 10-fold serial dilutions of reference human total RNA (from 1000 ng/µl to 0.01 ng/µl) produce consistent amplification results with all five targets.



Tip!

One-tube reagent will speed up laboratory procedures and reduce the risk of contamination

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	READ MORE
SOLIScript® Fast 1-step RT-qPCR Mix with UNG	08-87-0000S (free sample) 08-87-00200 08-87-00200-5 08-87-05000	50 200 1000 5000	

Products and samples
can be ordered via **e-mail:** orders@solisbiodyne.com, via **skype:** solis.biodyne, via **phone:** +372 740 9960, or via our **e-shop:** solisbiodyne.com

SOLIScript® 1-step Multiplex Probe Kit

Description

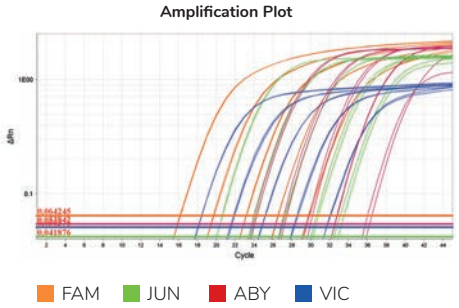
A convenient kit for analysis of RNA targets and performing highly specific cDNA synthesis and probe-based qPCR in a single tube. The kit is optimised for sensitive quantification of up to 4 targets in one reaction using TaqMan® or other hydrolysis probe types with enhanced amplification of GC-rich targets. It contains RiboGrip® RNase Inhibitor (220U/µl) and dUTPs to prevent cross-contamination when used with UNG treatment. It has three versions to match different instruments and assay requirements. ROX-kit is compatible with most qPCR instruments, including those that require low and high ROX level for signal normalization, Purple-kit is compatible with instruments that use Mustang Purple™ for signal normalisation.

Benefits

- cDNA synthesis up to 60°C for **superior specificity**
- analyze **1-4 targets** in 1 reaction
- robust amplification of **GC-rich** targets
- contains **dUTP** to prevent cross-contamination when used in combination with UNG
- **RNase inhibitor** included in kit
- wide instrument compatibility
- reaction set-up and shipment **without ice**

EXCELLENT FOR 4-PLEX ASSAYS

SOLIScript® 1-step Multiplex Probe Kit was used to perform 4-plex one-step RT-qPCR with five tenfold serial dilutions of human total RNA (RNA amount ranges from 4000 pg/µl to 0.4 pg/µl per reaction). Reactions were performed with Applied BioSystems™ QuantStudio™ 6 Flex cycler using Purple dye for normalization.



Did you know?

Products specifically developed for multiplex assays contain sufficient amount of reaction components for accurate amplification of all targets.

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	READ MORE
SOLIScript® 1-step Multiplex Probe Kit	08-55-0000S (free sample) 08-55-00250	50 250	
SOLIScript® 1-step Multiplex Probe Kit (ROX)	08-59-0000S (free sample) 08-59-00250	50 250	
SOLIScript® 1-step Multiplex Probe Kit (Purple)	08-61-0000S (free sample) 08-61-00250	50 250	

Products and samples
can be ordered via **e-mail:** orders@solisbiodyne.com, via **skype:** solis.biodyne, via **phone:** +372 740 9960, or via our **e-shop:** solisbiodyne.com

SOLIScript®
1-step Probe Kit

Description

A convenient kit for analysis of RNA targets and performing highly specific cDNA synthesis and probe-based qPCR in a single tube. The kit is optimised for sensitive detection of up to 2 targets in one reaction using TaqMan® or other hydrolysis probe types. It contains RiboGrip® RNase Inhibitor (220U/µl) and an internal reference based on ROX dye and is compatible with most qPCR instruments, including those that require low and high ROX level for signal normalization. The kit is not compatible with Probes detected in ROX/JUN/Texas Red channel.

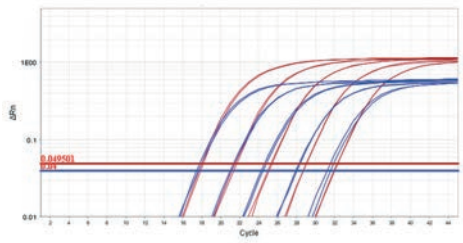
Benefits

- DNA synthesis up to 60°C for **superior specificity**
- suitable for assays with **1-2 targets**
- high specificity and sensitivity
- **RNase inhibitor** included in kit
- one kit for all cyclers
- reaction set-up and shipment **without ice**

EXCELLENT QUANTIFICATION IN DUPLEX ASSAYS

SOLIScript® 1-step Probe Kit was used to perform 2-plex one-step RT-qPCR with five tenfold serial dilutions of Human Reference RNA (total RNA pooled from 10 human cell lines). Reactions were performed with Applied BioSystems® QuantStudio™ 6 Flex cycler using ROX dye for normalization.

Amplification Plot



FAM VIC

Researchers already trust 1-step Probe Kit

Reference:

> We needed to perform PCR in the point-of-use where cold storage is not available. SOLIScript® 1-step Probe kit showed a good performance for detecting MS2 bacteriophage RNA after being stored at RT for 30 days. We have applied SOLIScript® 1-step Probe kit to the detection of viruses in environmental samples obtaining satisfactory results.

DAVID AGUADO and SÍLVIA BOFILL-MAS
University of Barcelona, Spain
Supplied by Genycell Biotech

Tip!

Elevating reaction temperature enables highly specific primer annealing during reverse transcription.

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	READ MORE
SOLIScript® 1-step Probe Kit	08-57-0000S (free sample) 08-57-00250	50 250	

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SolisFAST® 1-step RT-PCR Kit with UNG

Suitable for virus detection - determine the presence or absence of RNA

Great performance in both singleplex and multiplex RT-PCR assays

Easy to use, fast and sensitive

SolisFAST® 1-step RT-PCR Kit with UNG provides a simple and streamlined workflow for analyzing RNA targets using reverse transcription PCR (RT-PCR). Both the cDNA synthesis and PCR are conveniently performed in one tube greatly simplifying the analysis workflow, reducing reaction-to-reaction variation, minimizing hands-on steps and reducing reaction set-up to results time.

Exceptionally fast and robust **SolisFAST® polymerase** combined with our highly processive reverse transcriptases make SolisFAST® 1-step RT-PCR Kit with UNG the fastest kit on the market to perform RT-PCR with unparalleled under 1-hour reaction times. Optimized composition ensures superior sensitivity allowing detection of as little as 0.1 pg of RNA and enabling efficient multiplexing of up to 5 RNA targets simultaneously.

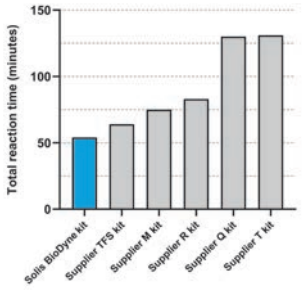


Figure 1. Total reaction times in minutes for amplifying a 496 bp fragment with SolisFAST® 1-step RT-PCR Kit with UNG and compared to one-step RT-PCR kits from various other suppliers using the fastest protocol as per their Data Sheet.

Highly sensitive and competitive detection of low amounts of RNA

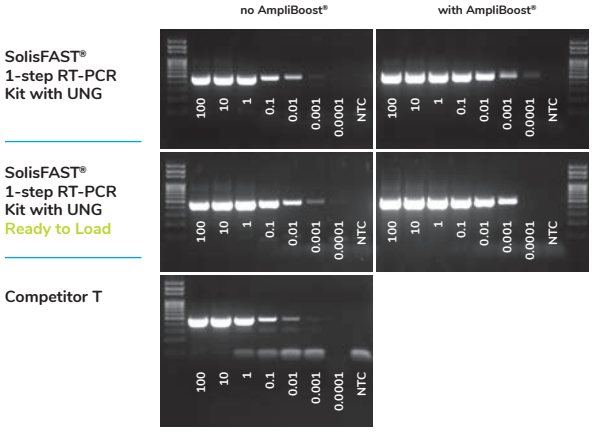


Figure 2. High sensitivity and robust detection from low RNA input amounts. A 496 bp fragment was successfully amplified from a serial dilution of 100 ng to 0.1 pg of Human Reference Total RNA (Agilent) using a quick cycling protocol (54 minutes total reaction time). Comparison with competitor T 1-step RT-PCR kit used according to manufacturer's Data Sheet.

Features

- **Faster than ever** – under **1-hour** RT-PCR cycling protocol
- **Superior sensitivity** – detect as little as **0.1 pg of RNA**
- **Discover the convenience of multiplexing** – amplify up to **5 targets** simultaneously in one reaction
- **Tackle GC-rich amplicons** with **AmpliBoost™** RT-PCR enhancer
- **Prevent carry-over contamination** with preblended **UNG** enzyme
- **Inherently stable** due to proprietary **Stability TAG** technology

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	READ MORE
SolisFAST® 1-step RT-PCR Kit with UNG	04-52-0000S (sample) 04-52-00050 04-52-00200 04-52-01000	50 50 200 1000	
SolisFAST® 1-step RT-PCR Kit with UNG Ready to Load	04-54-0000S (sample) 04-54-00050 04-54-00200 04-54-01000	50 50 200 1000	

Products and samples
can be ordered via **e-mail:** orders@solisbiodyne.com, via **skype:** solis.biodyne, via **phone:** +372 740 9960, or via our **e-shop:** solisbiodyne.com

SolisFAST® Lyo-ready qPCR Kit with UNG

SolisFAST® Lyo-Ready qPCR Kit with UNG represents a glycerol-free qPCR solution with optimized excipients that is suitable for reliable **lyophilization**. The Kit is designed for fast and sensitive amplification and quantification of DNA targets using probe-based assays. The formulation is tailored for effective freeze-drying to produce **stabilized cakes or beads** that easily dissolve upon reconstitution with sample material. With a high collapse temperature (Tc) of -30.8 °C, the kit allows for the adoption of **a rapid and energy-efficient lyophilization protocol**. With a glass transition temperature (Tg) of 68.3°C, the lyophilizates have a high resistance against long term exposure to higher temperatures. Lyophilizing together with primers and probes provides maximum convenience for further reaction set up. Inhibitor tolerance and fast extension rates of the SolisFAST® DNA Polymerase enable quick and robust DNA detection even from complex biological sample types.

The Kit comes in a flexible 2 tube format: a glycerol-free qPCR mix (5x) and a lyophilization excipient mix (4x).

SolisFAST® Lyo-Compatible qPCR Mix with UNG offers you:

- **Flexibility with lyophilization** – the qPCR mix formulation is glycerol free, making it suitable for freeze-drying. Either use it in combination with Solis BioDyne's proprietary SolisFAST® Lyo Excipient Mix (supplied with the kit) or opt for your own additives
- **Sensitive multiplex detection** – detect low copy numbers with up to 5-plexing
- **Short run times** - fast extension rates of the SolisFAST® DNA Polymerase enable you to save time by using quick cycling protocols
- **Peace of mind with UNG** – Salini UNG® Uracil-N-Glycosylase will eliminate carryover contamination and prevent false positive results

SolisFAST® Lyo Excipient Mix gives you:

- Efficient lyophilization into cakes and beads
- Strong cryoprotection during freeze-drying
- Stabilized lyophilizates with high resistance against long term exposure to higher temperatures
- Rapid and seamless reconstitution
- Preserved qPCR performance after lyophilization

Wide dynamic range

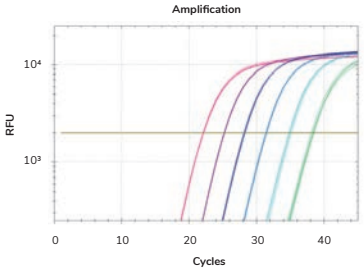


Figure 1. ALB target from human gDNA was amplified over six 10-fold dilutions (500 ng to 5 pg; E=104%), showing sensitive detection over a wide dynamic range. Reactions were run on Bio-Rad CFX96 platform.

Prevent false positive results with Salini UNG® Uracil-N-Glycosylase

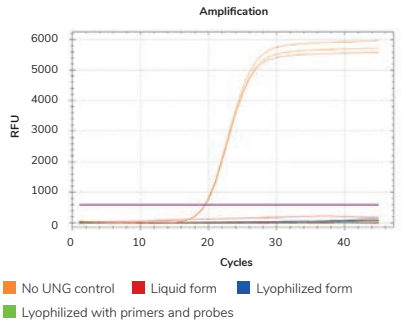


Figure 2. Amplification plot showcasing results obatained with SolisFAST® Lyo-Ready qPCR Kit with UNG in liquid form (red), lyophilized form (blue), lyophilized with primers and probes (green) and a formulation without UNG (orange). All reactions were spiked with an equal concentration of dU-containing amplicons, mimicking carryover contamination. UNG maintained full functionality in all conditions, degrading all the amplicons, while control reactions without UNG exhibited steady amplification.

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	READ MORE
SolisFAST® Lyo-ready qPCR Kit with UNG	28-52-0000S (free sample) 28-52-00250 28-52-00250-5 28-52-05000	100 250 5x250 5000	

Products and samples
can be ordered via **e-mail:** orders@solisbiodyne.com, via **skype:** solis.biodyne, via **phone:** +372 740 9960, or via our **e-shop:** solisbiodyne.com

Other glycerol-free and lyophilization compatible reagents

RiboGrip® RNase inhibitor (220 U/µl)

RiboGrip® RNase Inhibitor (220 U/µl) is an in silico-designed protein-based ribonuclease inhibitor, which inactivates RNase A, RNase B and RNase C.

Highly concentrated 220 U/µl and glycerol-free formulation ensures compatibility with lyophilization and air-drying.

Choose our glycerol-free RiboGrip® - for assays incorporating lyophilisation, air-drying or other applications requiring no glycerol!

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	SIZE (U)	20 µl REACTIONS	READ MORE
RiboGrip® Glycerol-Free RNase Inhibitor (220 U/µl)	06-29-0000S (free sample) 06-29-4000U 06-29-010KU	2000 U 4000 U 10 000 U	100 200 500	

Read more page 33

SoliSD™ Bsm DNA Polymerase

The enzyme is developed for Loop-Mediated Isothermal Amplification (LAMP), which is fast, sensitive, and compatible with POCT applications.

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/25 µl	KIT COMPONENTS	
SoliSD™ Lyo-compatible Bsm DNA Polymerase Kit	32-22-0000S (sample) 32-22-00250 32-22-01000	100 250 1000	SoliSD™ Glycerol-Free Bsm DNA Polymerase (40 U/µl) 25x SoliSD™ Supplement 10x Isothermal Reaction Buffer 100 mM MgSO4 10x GC-rich Enhancer	
SoliSD™ Lyo-compatible RT-LAMP Kit	32-23-0000S (sample) (Request quote)	250	SoliSD™ Glycerol-Free Bsm DNA Polymerase (40 U/µl) 300x RT Mix 10x RT-LAMP Reaction Buffer 100 mM MgSO4 10x GC-rich Enhancer	

Read more page 42

SoliSD™ Bsm DNA Polymerase

An extremely stable SoliSD™ Bsm DNA Polymerase in a flexible kit format

SoliSD™ Bsm DNA Polymerase sequence originates from the *Bacillus smithii* and includes a patented **Stability TAG** technology (Figure 1) [1]. This modification makes the enzyme exceptionally stable at elevated temperatures (Figure 2). Hence making transportation and shipment much cheaper and convenient with no need for a cold chain.* High-temperature stability ensures immense product quality, significantly reduced environmental impact, and facilitates logistics and handling.

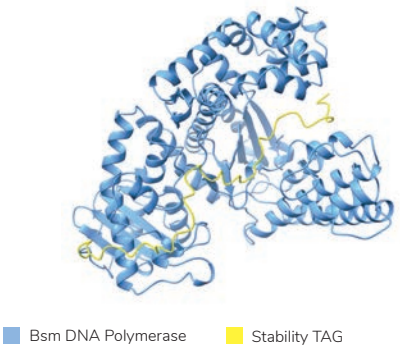


Figure 1. 3D model of SoliSD™ Bsm DNA Polymerase protein structure with the implemented Stability TAG technology. The protein structure was predicted with AlphaFold 2 [2, 3].

Features

- Enzyme stable for at least 1 month at 37°C
- Fast results in 4-20 minutes
- The enzyme is active at a wide range of temperatures between 51-62°C
- Unique **SoliSD™ Supplement system** for excellent performance
- Available in **glycerol-free lyo-compatible** format

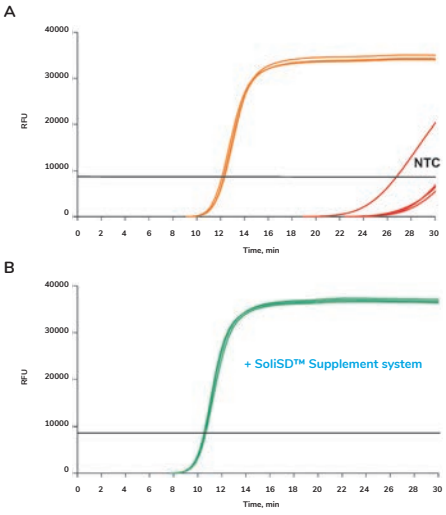


Figure 2. Unique SoliSD™ Supplement system improves enzyme performance. LAMP reactions were performed at 60°C (a) without or (b) with SoliSD™ Supplement system in the mixture. 0.2 ng/µl of hPOP7 target from human genomic DNA was amplified. Reactions were run on Bio-Rad CFX96 platform.

Unique SoliSD™ Supplement system

- The common issue of isothermal amplification assay design is no template control (NTC) signal. We have developed a unique **SoliSD™ Supplement system** for temperature-dependent enzyme activation to resolve this problem (Figure 2).
- An outstanding bonus of **SoliSD™ Supplement system** is minimizing variability between replicates, providing more consistent results.
- **SoliSD™ Supplement system** enables reaction set-up at room temperature, with no need to deal with ice boxes, freeing up benchtop space, and resulting in fewer surfaces to clean and lower contamination risk.

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/25 µl	KIT COMPONENTS
SoliSD™ Bsm DNA polymerase kit	32-21-0000S (sample) 32-21-00250 32-21-01000	100 250 1000	SoliSD™ Bsm DNA polymerase (8 U/µl) 10x Isothermal Reaction Buffer 100 mM MgSO4 25x SoliSD™ Supplement 10x GC-rich Enhancer
SoliSD™ Lyo-compatible Bsm DNA Polymerase Kit	32-22-0000S (sample) 32-22-00250 32-22-01000	100 250 1000	SoliSD™ Glycerol-Free Bsm DNA Polymerase (40 U/µl) 25x SoliSD™ Supplement 10x Isothermal Reaction Buffer 100 mM MgSO4 10x GC-rich Enhancer
SoliSD™ Lyo-compatible RT-LAMP Kit	32-23-0000S (sample) (Request quote)	250	SoliSD™ Glycerol-Free Bsm DNA Polymerase (40 U/µl) 300x RT Mix 10x RT-LAMP Reaction Buffer 100 mM MgSO4 10x GC-rich Enhancer

Products and samples
can be ordered via **e-mail:** orders@solisbiodyne.com, via **skype:** solis.biodyne, via **phone:** +372 740 9960, or via our **e-shop:** solisbiodyne.com

Salini UNG™ Uracil-N-Glycosylase

Salini UNG™ Uracil-N-Glycosylase is a unique heat-labile enzyme. The protein sequence originates from the bacteria genus *Salinivibrio* which is frequently found in hypersaline environments. Uracil-N-Glycosylase (UNG) efficiently eliminates uracil from single- or doublestranded DNA by catalyzing the hydrolysis of the N-glycosylic bond and leaving an abasic site. This property is widely used as a part of PCR carryover contamination prevention strategy. Salini UNG™ (Figure 1) is a genetically modified enzyme including a **Stability TAG** - Solis BioDyne's proprietary and patented polypeptide stabilization technology that makes all our proteins extremely stable at room temperature [1,2,3].

[1] Kahre, O. et al., Compositions for increasing polypeptide stability and activity, and related methods, EP2501716B1 (2015) and US9321999B2 (2016).
[2] Jumper, J. et al. Highly accurate protein structure prediction with AlphaFold. Nature (2021).
[3] Varadi, M. et al. AlphaFold Protein Structure Database: massively expanding the structural coverage of protein-sequence space with high-accuracy models. Nucleic Acids Research (2021).

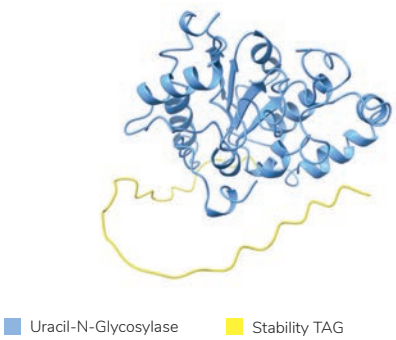


Figure 1. 3D model of Salini UNG™ Uracil-N-Glycosylase protein structure with the Stability TAG. Protein structure was predicted with AlphaFold 2.

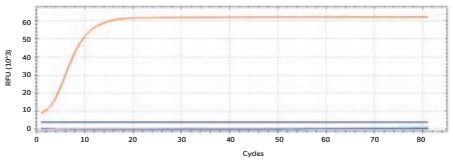


Figure 2. Heat inactivation of Salini UNG™ Uracil-N-Glycosylase. UNG activity is measured at 37°C for 40 minutes using Bio-Rad CFX96 platform by the release of fluorescence from a uracil containing probe labeled with a FAM fluorophore and a quencher. In a resting state the probe forms a duplex and FAM fluorescence is quenched. An active UNG cleaves uracil, the duplex dissociates and FAM fluorescence is emitted. To test the inactivation of the enzyme, Salini UNG™ was heat-treated at 70°C for 5 minutes. No reactivation was detected after storing the heat-treated samples at 4°C (Figure 2) or 25°C (data not shown) for 48h.

Features

- **Stable** at 25°C for at least 2 months and at 37°C 2 weeks
- **Heat-labile** (compatible with Sanger sequencing). No reactivation is detected after heat inactivation
- **Fast** 30 sec reaction time
- **Tolerant** to common inhibitors
- Reaction set-up and shipment without ice
- Glycerol-free formulation is available

Applications

- Widely used to eliminate carryover contamination in PCR and LAMP
- Enhancer of cloning efficiency of PCR products
- Site-directed mutagenesis
- As a probe for protein-DNA interaction studies
- Glycosylase-mediated single nucleotide polymorphism detection (GMPD)
- Study of DNA repair and mutation detection
- SNP genotyping

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	SIZE[1]	READ MORE
Salini UNG™ Uracil-N-Glycosylase, 1 U/µl	31-01-00000-S (free sample) 31-01-00100 31-01-00100-5	25 µl 100 µl 5 x 100 µl	

[1] Volume in µl or count of 20 µl reactions. All PCR and qPCR Master Mixes are 5x-concentrated solutions supplied in 1 ml or 20 ml vials or bottles (a' 250 rxn and 5000 rxn, respectively).

Bulk solutions available

Products and samples
can be ordered via **e-mail:** orders@solisbiodyne.com, via **skype:** solis.biodyne, via **phone:** +372 740 9960, or via our **e-shop:** solisbiodyne.com

TERMIPol®
DNA Polymerase Kit

Description

Thermostable DNA polymerase that has an increased efficiency for incorporating unconventional nucleotides such as ddNTPs, acyNTPs or fluorescent nucleotides. TERMIPol® DNA Polymerase Kit is supplied with a reaction buffer and 100 mM $MgCl_2$.

Benefits

- high efficiency for incorporating **unconventional nucleotides**
- assay success rate of 99% in **MALDI-TOF**
- suitable for **DNA microarray-based SNP genotyping**
- robust and reliable
- reaction set-up and shipment **without ice**

Did you know?

The ability to incorporate unconventional nucleotides makes TERMIPol® suitable for primer extension, MassARRAY and MALDI-TOF mass spectrometry.

Researchers already trust TERMIPol®

Reference:

> Our group is using the TERMIPol® already for 10 years for primer extension reactions with subsequent HPLC separation. Compared to similar products on the market TERMIPol® incorporates ddNTPs with high efficiency and low error rates. We highly recommend using this enzyme for SNP genotyping or bisulfite-based single CpG screening, as low as 1.25 U are sufficient per reaction. Since no detergents are used in storage and reaction buffers, primer extension reactions can be loaded unpurified on HPLC systems which saves time and costs. We are using this enzyme frequently and experienced TERMIPol® as robust and reliable enzyme offering highly efficient and reproducible results.

DR. SASCHA TIERLING
Universität des Saarlandes, Germany

Selected publications:

- Hiseni, P. et al., BioTechniques. (2023)
- Maji, R. K. et al., Epigenetics & Chromatin. (2023)
- Bormann, F. et *al.*, Int. J. Cancer. (2018)
- Royo, J.L. et *al.*, Mol. Cell. Probes. (2015)

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	SIZE in U	READ MORE
TERMIPol® DNA Polymerase Kit (5 U/µl)	01-03-KIT-0000S (free sample) 01-03-KIT-00500 01-03-KIT-02000	500 500 2000	
HOT TERMIPol® DNA Polymerase Kit (5 U/µl)	01-06-KIT-0000S (free sample) 01-06-KIT-00500 01-06-KIT-02000	500 500 2000	

Products and samples
can be ordered via **e-mail:** orders@solisbiodyne.com, via **skype:** solis.biodyne, via **phone:** +372 740 9960, or via our **e-shop:** solisbiodyne.com

dNTP Mix and Set

Description

Solis BioDyne's dNTPs are chemically synthesized and have 99% purity determined by HPLC. You can use our dNTPs for a wide range of molecular biology applications.

dNTP Set

Separate vials of dATP, dTTP, dGTP and dCTP at 100 mM concentration.

dNTP Mix

One solution of dATP, dTTP, dGTP and dCTP at 20 mM concentration each.

dUTP

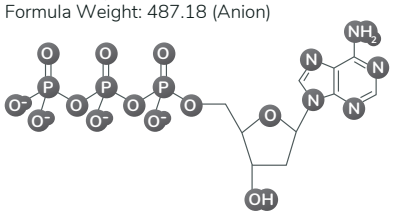
dUTP is available in a separate vial with a concentration of 100 mM.

> In 2005 we started to use the Solis BioDyne dNTP Set in our lab. Comparing the performance of Solis BioDyne dNTPs with two other suppliers in a mutation detection assay, we found similar or even higher FRET signals in our analysed samples. Since then, we use the Solis BioDyne dNTP Set in our lab in a wide range of DNA and RNA amplification techniques like end point PCR, mutation detection in FRET assays, qPCR, high resolution melting analysis etc.

JUERGEN SIEVERTSEN
Bernhard Nocht Institute for Tropical Medicine (BNITM), Germany

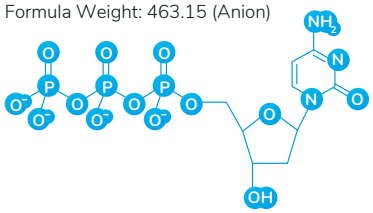
dATP

Formula: $C_{10}H_{12}N_5O_{12}P_3$ (Anion)
Formula Weight: 487.18 (Anion)



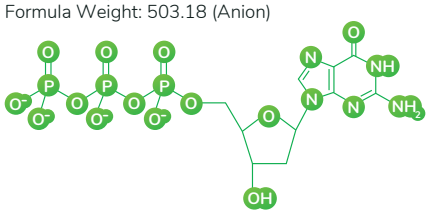
dCTP

Formula: $C_9H_{12}N_3O_{13}P_3$ (Anion)
Formula Weight: 463.15 (Anion)



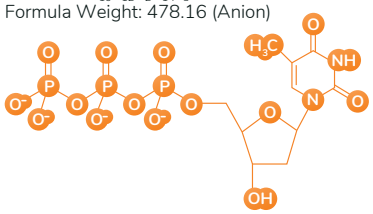
dGTP

Formula: $C_{10}H_{12}N_5O_{13}P_3$ (Anion)
Formula Weight: 503.18 (Anion)



dTTP

Formula: $C_{10}H_{12}N_2O_{14}P_3$ (Anion)
Formula Weight: 478.16 (Anion)



Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	SIZE	READ MORE
dNTP Set	02-21-0001S (free sample) 02-21-00100 02-21-00400	4x1 µmol / 4x0.01 ml 4x25 µmol / 4x0.25 ml 4x100 µmol / 4x1 ml	
dNTP Mix	02-31-0001S (free sample) 02-31-00020 02-31-00020-5 02-31-00020-10 02-31-00100	0.8 µmol / 0.01 ml 20 µmol / 0.25 ml 5x (20 µmol / 0.25 ml) 10x (20 µmol / 0.25 ml) 100 µmol / 1.25 ml	
dUTP	02-41-0000S (free sample) 02-41-00025	2.5 µmol / 0.025 ml 25 µmol / 0.25 ml	

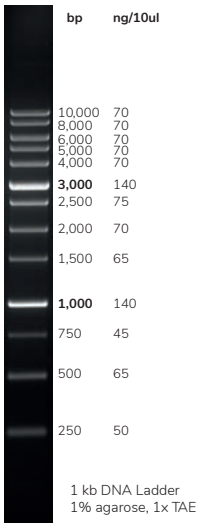
Products and samples
can be ordered via **e-mail:** orders@solisbiodyne.com, via **skype:** solis.biodyne, via **phone:** +372 740 9960, or via our **e-shop:** solisbiodyne.com

100 bp DNA Ladder
1 kb DNA Ladder

Description

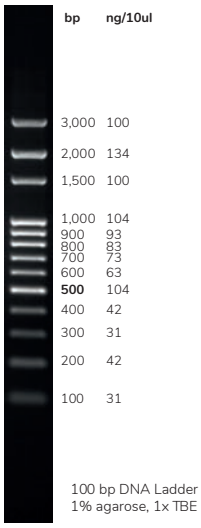
Solis BioDyne DNA ladders are convenient ready-to-use molecular weight markers for DNA fragment size determination on gel electrophoresis. The ladders are supplied in a loading buffer and are stable at ambient temperature. The 1 kb DNA Ladder contains 13 discrete DNA fragments ranging from 250 bp to 10,000 bp. The 100 bp DNA Ladder contains 13 discrete DNA fragments ranging from 100 bp to 3,000 bp.

1 KB DNA LADDER



1 kb DNA Ladder
1% agarose, 1x TAE

100 BP DNA LADDER



100 bp DNA Ladder
1% agarose, 1x TBE

6x DNA Loading Dye Buffers

Description

6x DNA Loading Dye Buffers are used to prepare DNA markers and samples for loading on agarose or polyacrylamide gels. The optimized solutions contain different mixtures of three dyes: Bromophenol Blue, Xylene Cyanol FF and Orange G for visual tracking of DNA migration during electrophoresis.
6x DNA Loading Dye Buffers containing Orange G are recommended for the analysis of small DNA molecules and have no DNA masking during gel exposure to UV light.
6x DNA Loading Dye Buffers Blue and Double Blue make pipetting visually easy with its dark blue color.

LOADING DYE BUFFERS

In 1% agarose gel 1x TBE, Xylene Cyanol FF migrates along with~3500 bp fragments. Bromophenol Blue migrates along with ~300 bp fragments and Orange G migrates along with ~40 bp fragments.

Lane	DNA Loading Dye Buffer
1	Blue
2	Double Blue
3	Orange and Blue
4	Orange

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	SIZE	READ MORE
100 bp DNA Ladder Ready To Load	07-11-0000S (free sample) 07-11-00050 07-11-00050-5 07-11-00050-10	1.5 µg / 0.015 ml 50 µg / 0.5 ml 5x (50 µg / 0.5 ml) 10x (50 µg / 0.5 ml)	
1 kb DNA Ladder Ready To Load	07-12-0000S (free sample) 07-12-00050 07-12-00050-5 07-12-00050-10	1.5 µg / 0.015 ml 50 µg / 0.5 ml 5x (50 µg / 0.5 ml) 10x (50 µg / 0.5 ml)	
6x DNA Loading Dye Buffer Blue	07-01-0000S (free sample) 07-01-00001 07-01-00010	0.1 ml 1 ml 10 ml	
6x DNA Loading Dye Buffer Double Blue	07-02-0000S (free sample) 07-02-00001 07-02-00010	0.1 ml 1 ml 10 ml	
6x DNA Loading Dye Buffer Orange and Blue	07-03-0000S (free sample) 07-03-00001 07-03-00010	0.1 ml 1 ml 10 ml	
6x DNA Loading Dye Buffer Orange	07-04-0000S (free sample) 07-04-00001 07-04-00010	0.1 ml 1 ml 10 ml	

Products and samples
can be ordered via **e-mail:** orders@solisbiodyne.com, via **skype:** solis.biodyne, via **phone:** +372 740 9960, or via our **e-shop:** solisbiodyne.com

10x GC-rich Enhancer

Description

10x GC-rich Enhancer is used as PCR additive for difficult GC-rich templates. The optimized solution modifies melting behavior of nucleic acids and often enhances amplification of suboptimal PCR systems with high degree of secondary structures and GC-rich regions.
10x GC-rich Enhancer should be used at a defined working concentration (1x, 2x or 3x solution) and only if non-specific amplification occurs.

Applications

- additive for PCR reaction

25 mM $MgCl_2$

Description

Magnesium Chloride ($MgCl_2$) is an important component of PCR reactions. Concentration of $MgCl_2$ should be optimized according to reaction conditions (primer, template, dNTP, polymerase concentration).

Applications

- optimization of PCR, qPCR and RT-PCR reactions
- all other molecular biology techniques where $MgCl_2$ is needed

PCR Grade Water

Description

PCR Grade Water is deionized and autoclaved water suitable for use in all experiments that require nuclease-free water. PCR Grade Water is prepared without chemical additives and it is pyrogen-, nuclease-, protease- and bacteria-free.

Applications

- PCR, qPCR and RT-PCR
- all other molecular biology techniques where pure water is needed

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	SIZE in ml	READ MORE
10x GC-rich Enhancer	05-16-0000S (free sample) 05-16-00010 05-16-00050	0.1 1 5	
25 mM $MgCl_2$	05-11-00025 05-11-00050	2.5 5	
PCR Grade Water	water-025 water-100 water-500	25 100 500	

Products and samples
can be ordered via **e-mail:** orders@solisbiodyne.com, via **skype:** solis.biodyne, via **phone:** +372 740 9960, or via our **e-shop:** solisbiodyne.com

Ordering

All standard Solis BioDyne products are shipped at ambient temperature, without using dry ice.

Our products can withstand room temperature up to 1 month without any loss of activity. However, routine storage at -20°C is required to ensure maximum shelf life.

Free samples

Solis BioDyne provides free samples of the entire product range enabling our clients to thoroughly test our products.

How to Order

Orders can be placed:

- **via E-Shop: solisbiodyne.com**
- **by emailing: orders@solisbiodyne.com**
- **with your account manager or local distributor**

Required Information

Following information is required while placing an order:

- shipping and invoice address
- contact person's name and phone number
- VAT number (EU only)
- product name and corresponding catalogue number

Shipping

Unless agreed otherwise, all shipments abroad will be arranged via express courier service. Orders are confirmed generally within 1 business day (Monday to Friday, 8AM to 5PM, UTC+2) after receipt. In most cases orders are shipped within 1 to 3 business days.

Shipping Cost

Depending on the order amount a shipping cost may be added to the invoice. Please contact us for shipping cost quotation.

Delivery documents and other charges

For non-EU shipments, please inform us of the documents required for shipments to your country. Solis BioDyne is not liable for import duties and taxes or delays caused by the brokerage procedure or other third parties.

Payment Options

Solis BioDyne accepts payments by:

- wire transfer, based on invoice
- credit card (VISA or Master Card) for orders placed through our e-shop

Checks are not accepted as a payment method.

Customized solutions

This product catalogue contains standard products, tube sizes and kits. Please contact us if you have a specific requirement but cannot find the best solution among our catalog products. We may be able to offer you bulk product, tailored product sizes and formats, or specific formulations. We are flexible and dedicated to meeting your needs.

Customer Care

We are committed to providing our customers excellent service. All inquiries will be responded to within 1 business day at most. All technical questions will be given high priority and our full attention.

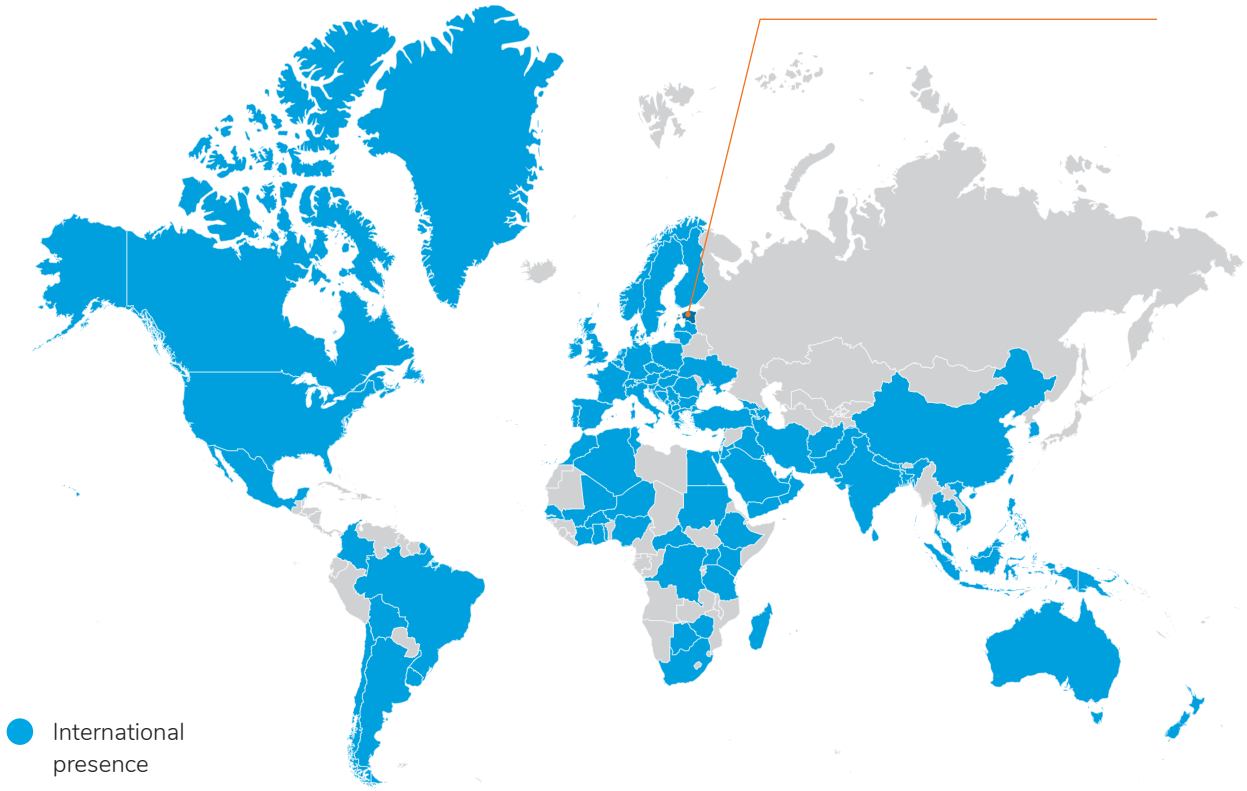
Please contact us through online chat on our website or via e-mail: info@solisbiodyne.com

Please see our full ordering conditions on solisbiodyne.com

International Presence & Distributors

Solis BioDyne has customers in almost 100 countries. We make our reagents available globally either by direct delivery or relying on our local distributors who share our high standards of service and technical support. Please see the list of distributors below or contact us to find the most convenient solution for ordering in your area.

We are based in Estonia, a member of the European Union and €-zone



ATTENTION!

The most up-to-date list of distributors is available on our website

Product List

Hot-start PCR Mixes

Fast Cycling	Cat. No.	Size
SolisFAST® Master Mix	24-01-00001 24-01-00001-5 24-01-00020	250 rxn/20 µl 5x (250 rxn/20 µl) 5000 rxn/20 µl
SolisFAST® Master Mix **Ready To Load**	24-02-00001 24-02-00001-5 24-02-00020	250 rxn/20 µl 5x (250 rxn/20 µl) 5000 rxn/20 µl
SolisFAST® Master Mix with UNG	24-21-00001 24-21-00001-5 24-21-00020	250 rxn/20 µl 5x (250 rxn/20 µl) 5000 rxn/20 µl
SolisFAST® Master Mix with UNG **Ready To Load**	24-22-00001 24-22-00001-5 24-22-00020	250 rxn/20 µl 5x (250 rxn/20 µl) 5000 rxn/20 µl
Standard Cycling	**Cat. No.**	**Size**
HOT FIREPol® MultiPlex Mix with 10 mM $MgCl_2$	04-34-00120 04-34-00120-5 04-34-00120-10 04-34-02020	250 rxn/20 µl 5x (250 rxn/20 µl) 10x (250 rxn/20 µl) 5000 rxn/20 µl
HOT FIREPol® MultiPlex Mix **Ready To Load** with 10 mM $MgCl_2$	04-36-00120 04-36-00120-5 04-36-00120-10 04-36-02020	250 rxn/20 µl 5x (250 rxn/20 µl) 10x (250 rxn/20 µl) 5000 rxn/20 µl
HOT FIREPol® GC Master Mix Kit	04-43-00115 04-43-00115-5 04-43-02015	250 rxn/20 µl 5x (250 rxn/20 µl) 5000 rxn/20 µl
HOT FIREPol® Blend Master Mix with 7.5 mM $MgCl_2$	04-27-0115 04-27-00115-5 04-27-00115-10 04-27-02015	250 rxn/20 µl 5x (250 rxn/20 µl) 10x (250 rxn/20 µl) 5000 rxn/20 µl
HOT FIREPol® Blend Master Mix with 10 mM $MgCl_2$	04-27-0120 04-27-00120-5 04-27-00120-10 04-27-02020	250 rxn/20 µl 5x (250 rxn/20 µl) 10x (250 rxn/20 µl) 5000 rxn/20 µl
HOT FIREPol® Blend Master Mix with 12.5 mM $MgCl_2$	04-27-0125 04-27-00125-5 04-27-00125-10 04-27-02025	250 rxn/20 µl 5x (250 rxn/20 µl) 10x (250 rxn/20 µl) 5000 rxn/20 µl
HOT FIREPol® Blend Master Mix **Ready To Load** with 7.5 mM $MgCl_2$	04-25-0115 04-25-00115-5 04-25-00115-10 04-25-02015	250 rxn/20 µl 5x (250 rxn/20 µl) 10x (250 rxn/20 µl) 5000 rxn/20 µl
HOT FIREPol® Blend Master Mix **Ready to Load** with 10 mM $MgCl_2$	04-25-0120 04-25-00120-5 04-25-00120-10 04-25-02020	250 rxn/20 µl 5x (250 rxn/20 µl) 10x (250 rxn/20 µl) 5000 rxn/20 µl
HOT FIREPol® Blend Master Mix **Ready to Load** with 12.5 mM $MgCl_2$	04-25-0125 04-25-00125-5 04-25-00125-10 04-25-02025	250 rxn/20 µl 5x (250 rxn/20 µl) 10x (250 rxn/20 µl) 5000 rxn/20 µl

Master Mixes

	Cat. No.	Size
FIREPol® Master Mix with 7.5 mM $MgCl_2$	04-11-0115 04-11-00115-5 04-11-00115-10	250 rxn/20 µl 5x (250 rxn/20 µl) 10x (250 rxn/20 µl)
FIREPol® Master Mix with 12.5 mM $MgCl_2$	04-11-0125 04-11-00125-5 04-11-00125-10	250 rxn/20 µl 5x (250 rxn/20 µl) 10x (250 rxn/20 µl)
FIREPol® Master Mix **Ready to Load** with 7.5 mM $MgCl_2$	04-12-0115 04-12-00115-5 04-12-00115-10	250 rxn/20 µl 5x (250 rxn/20 µl) 10x (250 rxn/20 µl)
FIREPol® Master Mix **Ready to Load** with 12.5 mM $MgCl_2$	04-12-0125 04-12-00125-5 04-12-00125-10	250 rxn/20 µl 5x (250 rxn/20 µl) 10x (250 rxn/20 µl)

Standalone PCR Enzyme Kits

	Cat. No.	Size
HOT FIREPol® DNA Polymerase Kit (5 U/µl)	01-02-KIT-0500 01-02-KIT-1000	500 U 1000 U
FIREPol® DNA Polymerase Kit (5 U/µl)	01-01-KIT-0500 01-01-KIT-1000 01-01-KIT-02000	500 U 1000 U 2000 U

Dye-based qPCR Master Mixes

Fast Cycling	Cat. No.	Size
SolisFAST® SolisGreen® qPCR Mix (no ROX)	28-41-00001 28-41-00001-5 28-41-00020	250 rxn/20 µl 5x (250 rxn/20 µl) 5000 rxn/20 µl
SolisFAST® SolisGreen® qPCR Mix (ROX)	28-46-00001 28-46-00001-5 28-46-00020	2250 rxn/20 µl 5x (250 rxn/20 µl) 5000 rxn/20 µl
Standard Cycling	**Cat. No.**	**Size**
HOT FIREPol® SolisGreen® qPCR Mix 2.0	08-46-00001 08-46-00001-5 08-46-00001-10 08-46-00020	250 rxn/20 µl 5x (250 rxn/20 µl) 10x (250 rxn/20 µl) 5000 rxn/20 µl
HOT FIREPol® EvaGreen® qPCR Supermix	08-36-00001 08-36-00001-5 08-36-00001-10 08-36-00020	250 rxn/20 µl 5x (250 rxn/20 µl) 10x (250 rxn/20 µl) 5000 rxn/20 µl
HOT FIREPol® EvaGreen® qPCR Mix Plus (no ROX)	08-25-00001 08-25-00001-5 08-25-00001-10 08-25-00020	250 rxn/20 µl 5x (250 rxn/20 µl) 10x (250 rxn/20 µl) 5000 rxn/20 µl
HOT FIREPol® EvaGreen® qPCR Mix Plus (ROX)	08-24-00001 08-24-00001-5 08-24-00001-10 08-24-00020	250 rxn/20 µl 5x (250 rxn/20 µl) 10x (250 rxn/20 µl) 5000 rxn/20 µl
HOT FIREPol® EvaGreen® qPCR Mix Plus (Capillary)	08-26-00001 08-26-00001-5 08-26-00001-10 08-26-00020	250 rxn/20 µl 5x (250 rxn/20 µl) 10x (250 rxn/20 µl) 5000 rxn/20 µ
HOT FIREPol® EvaGreen® HRM Mix (no ROX)	08-31-00001 08-31-00001-5 08-31-00001-10 08-31-00020	250 rxn/20 µl 5x (250 rxn/20 µl) 10x (250 rxn/20 µl) 5000 rxn/20 µ
HOT FIREPol® EvaGreen® HRM Mix (ROX)	08-33-00001 08-33-00001-5 08-33-00001-10 08-33-00020	250 rxn/20 µl 5x (250 rxn/20 µl) 10x (250 rxn/20 µl) 5000 rxn/20 µ

Probe-based qPCR Master Mixes

Fast Cycling	Cat. No.	Size
SolisFAST® Probe qPCR Mix (no ROX)	28-01-00001 28-01-00001-5 28-01-00020	250 rxn/20 µl 5x (250 rxn/20 µl) 5000 rxn/20 µl
SolisFAST® Probe qPCR Mix (ROX)	28-02-00001 28-02-00001-5 28-02-00020	250 rxn/20 µl 5x (250 rxn/20 µl) 5000 rxn/20 µl
SolisFAST® Probe qPCR Mix (Purple)*	28-03-00001 28-03-00001-5 28-03-00020	250 rxn/20 µl 5x (250 rxn/20 µl) 5000 rxn/20 µl
SolisFAST® Probe qPCR Mix with UNG (no ROX)	28-21-00001 28-21-00001-5 28-21-00020	250 rxn/20 µl 5x (250 rxn/20 µl) 5000 rxn/20 µl
SolisFAST® Probe qPCR Mix with UNG (ROX)	28-22-00001 28-22-00001-5 28-22-00020	250 rxn/20 µl 5x (250 rxn/20 µl) 5000 rxn/20 µl
SolisFAST® Probe qPCR Mix with UNG (Purple)	28-23-00001 28-23-00001-5 28-23-00020	250 rxn/20 µl 5x (250 rxn/20 µl) 5000 rxn/20 µl
Standard Cycling	**Cat. No.**	**Size**
HOT FIREPol® Multiplex qPCR Mix	08-01-00001 08-01-00001-5 08-01-00001-10 08-01-00020	250 rxn/20 µl 5x (250 rxn/20 µl) 10x (250 rxn/20 µl) 5000 rxn/20 µl
HOT FIREPol® Multiplex qPCR Mix (ROX)	08-02-00001 08-02-00001-5 08-02-00001-10 08-02-00020	250 rxn/20 µl 5x (250 rxn/20 µl) 10x (250 rxn/20 µl) 5000 rxn/20 µl
HOT FIREPol® Multiplex qPCR Mix (Purple)	08-03-00001 08-03-00001-5 08-03-00001-10 08-03-00020	250 rxn/20 µl 5x (250 rxn/20 µl) 10x (250 rxn/20 µl) 5000 rxn/20 µl
HOT FIREPol® Probe Universal qPCR Kit	08-88-00250 08-88-00250-5 08-88-05000	250 rxn/20 µl 5x (250 rxn/20 µl) 5000 rxn/20 µl
HOT FIREPol® Probe qPCR Mix Plus (no ROX)	08-15-00001 08-15-00001-5 08-15-00001-10 08-15-00020	250 rxn/20 µl 5x (250 rxn/20 µl) 10x (250 rxn/20 µl) 5000 rxn/20 µl
HOT FIREPol® Probe qPCR Mix Plus (ROX)	08-14-00001 08-14-00001-5 08-14-00001-10 08-14-00020	250 rxn/20 µl 5x (250 rxn/20 µl) 10x (250 rxn/20 µl) 5000 rxn/20 µl
HOT FIREPol® Probe qPCR Mix Plus (Capillary)	08-16-00001 08-16-00001-5 08-16-00001-10 08-16-00020	250 rxn/20 µl 5x (250 rxn/20 µl) 10x (250 rxn/20 µl) 5000 rxn/20 µl

One-step RT-qPCR Kits

Dye-based Kit	Cat. No.	Size
SOLIScript® 1-step SolisGreen® Kit	08-63-00250	250 rxn/20 µl
Probe-based Kits	**Cat. No.**	**Size**
SOLIScript® Fast 1-step RT-qPCR Mix with UNG	08-87-00200 08-87-00200-5 08-87-05000	200 rxn/20 µl 1000 rxn/20 µl 5000 rxn/20 µl
SOLIScript® 1-step Probe Kit	08-57-00250	250 rxn/20 µl
SOLIScript® 1-step Multiplex Probe Kit	08-55-00250	250 rxn/20 µl
SOLIScript® 1-step Multiplex Probe Kit (ROX)	08-59-00250	250 rxn/20 µl
SOLIScript® 1-step Multiplex Probe Kit (Purple)	08-61-00250	250 rxn/20 µl

One step end-point RT-PCR kits

	Cat. No.	Size
SolisFAST® 1-step RT-PCR Kit with UNG	04-52-00050 04-52-00200 04-52-01000	50 rxn/20 µl 500 rxn/20 µl 1000 rxn/20 µl
SolisFAST® 1-step RT-PCR Kit with UNG **Ready to Load**	04-54-00050 04-54-00200 04-54-01000	50 rxn/20 µl 500 rxn/20 µl 1000 rxn/20 µl

cDNA Synthesis

	Cat. No.	Size
FIREScript® RT cDNA synthesis MIX with Oligo (dT) and Random primers	06-20-0100 06-20-0500	100 rxn/20 µl 500 rxn/20 µl
FIREScript® RT cDNA synthesis MIX with Oligo (dT) primer	06-18-0100 06-18-0500	100 rxn/20 µl 500 rxn/20 µl
FIREScript® RT cDNA synthesis MIX with Random primers	06-19-0100 06-19-0500	100 rxn/20 µl 500 rxn/20 µl
FIREScript® RT cDNA synthesis MIX without primers	06-17-0100 06-17-0500	100 rxn/20 µl 500 rxn/20 µl
FIREScript® RT cDNA synthesis KIT	06-15-00050 06-15-0200	50 rxn/20 µl 200 rxn/20 µl
FIREScript® KIT	06-13-00050 06-13-00200	50 rxn/20 µl 200 rxn/20 µl
SOLIScript® RT cDNA synthesis MIX	06-37-00100 06-37-00500	50 rxn/20 µl 200 rxn/20 µl
SOLIScript® RT cDNA synthesis KIT	06-35-00050 06-35-00200	50 rxn/20 µl 200 rxn/20 µl
SOLIScript® KIT	06-33-00050 06-33-00200	50 rxn/20 µl 200 rxn/20 µl
RiboGrip® RNase Inhibitor (220U/µl)	06-26-4000U 06-26-010kU	4000 U/18 µl 10 000 U/45 µl

Isothermal amplification

	Cat. No.	Size
SoliSD™ Bsm DNA Polymerase Kit	32-21-00250 32-21-01000	250 rxn/25 µl 1000 rxn/25 µl
SoliSD™ Lyo-compatible Bsm DNA Polymerase Kit	32-22-00250 32-22-01000	250 rxn/25 µl 1000 rxn/25 µl
SoliSD™ Lyo-compatible RT-LAMP Kit	32-23-00250	250 rxn/25 µl

Glycerol free and lyophilization compatible reagents

Probe-based qPCR Kits	Cat. No.	Size
SolisFAST® Lyo-ready qPCR Kit with UNG	28-52-00250 28-52-00250-5 28-52-05000	250 rxn/20 µl 5x250 rxn/20 µl 5000 rxn/20 µl
Additional lyo-compatible reagents and proteins	**Cat. No.**	**Size**
RiboGrip® Glycerol-Free RNase Inhibitor (220 U/µl)	06-29-4000U 06-29-010kU	200 rxn/20 µl 500 rxn/20 µl

Additional Enzymes and Reagents

	Cat. No.	Size
TERMIPol® DNA Polymerase Kit (5 U/µl)	01-03-KIT-0500 01-03-KIT-02000	500 U 2000 U
HOT TERMIPol® DNA Polymerase Kit (5 U/µl)	01-06-KIT-00500 01-06-KIT-02000	500 U 2000 U
dNTP Set	02-21-0100 02-21-0400	4x25 µmol / 4x0.25 ml 4x100 µmol/ 4x1 ml
dNTP Mix	02-31-00020 02-31-00020-5 02-31-00020-10 02-31-00100	20 µmol / 0.25 ml 5x (20 µmol / 0.25 ml) 10x (20 µmol / 0.25 ml) 100 µmol / 1.25 ml
dUTP	02-41-00025	25 µmol / 0.25 ml
Salini UNG® Uracil-N-Glycosylase	31-01-0000S 31-01-00100 31-01-00100-5	25 U 100 U 500 U (5 x 100 U)
100 bp DNA Ladder **Ready to Load**	07-11-00050 07-11-00050-5 07-11-00050-10	50 µg / 0.5 ml 5x (50 µg / 0.5 ml) 10x (50 µg / 0.5 ml)
1 kb DNA Ladder **Ready to Load**	07-12-00050 07-12-00050-5 07-12-00050-10	50 µg / 0.5 ml 5x (50 µg / 0.5 ml) 10x (50 µg / 0.5 ml)
6x DNA Loading Dye Buffer Blue	07-01-00001 07-01-00010	1 ml 10 ml
6x DNA Loading Dye Buffer Double Blue	07-02-00001 07-02-00010	1 ml 10 ml
6x DNA Loading Dye Buffer Orange and Blue	07-03-00001 07-03-00010	1 ml 10 ml
6x DNA Loading Dye Buffer Orange	07-04-00001 07-04-00010	1 ml 10 ml
10x GC-rich Enhancer	05-16-00010 05-16-00050	1 ml 5 ml
25 mM $MgCl_2$	05-11-00025 05-11-00050	2.5 ml 5 ml
PCR Grade Water	water-025 water-100 water-500	25 ml 100 ml 500 ml

SOLIS BIODYNE OÜ
A: Teaduspargi 9, 50411 Tartu, Estonia
REG NO: 10242922
VAT NO: EE100587614

E: info@solisbiodyne.com
T: +372 7409 960
F: +372 7402 079
SKYPE: solis.biodyne

B: Swedbank AS
IBAN code: EE692200221005142234
SWIFT: HABAEE2X
Liivalaia 8, 15040 Tallinn, Estonia

solisbiodyne.com

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