

SOLIS
BIODYNE



Exclusivas Pascual y Furio

Tel: 96 134 37 45; Fax: 96 134 33 50

www.pascualyfurio.com

C/. Islas Canarias, 1.

Pol. Ind. Fuente del Jorro- 2ª Fase

46988 PATERNA (Valencia)

Product Catalogue 2021

Life Science for a Better Life

EXCLUSIVAS DE PASCUAL Y FURIO

C/ Islas Canarias n1 Pol. Ind. Fuente del Jarro
46988 Paterna, España

Teléfono: 961 34 37 45

Email: info@pascualyfurio.com; www.pascualyfurio.com

Del; Enrique Sevilla; Tef: 609223164;

Email: esevilla@pascualyfurio.com



Table of Contents

Polypeptide Stabilization Technology: Stability TAG	2
Quality Control & ISO Standards	5
Product Format and Packaging	5
Endpoint PCR Enzymes and Master Mixes: Product Selection Guide	6
Hot-start PCR Mixes	
Standard PCR Mixes	
PCR Enzymes	
qPCR Mixes: Product Selection Guides	16
Dye-based qPCR: Mix Compatibility Table	17
Dye-based qPCR Mixes	
Probe-based qPCR: Mix Compatibility Table	23
Probe-based qPCR Mixes	
First-strand cDNA Synthesis	29
FIREScript® Reverse Transcriptase and cDNA Synthesis Kits and Mixes	
One-step RT-qPCR Kits: Product Selection Guide	31
NEW! Dye-based RT-qPCR Kit	
Probe-based RT-qPCR Kits	
Additional Enzymes and Reagents	36
Enzymes for MALDI-TOF	
Nucleotides: dNTP Mix and Set	
DNA Ladders: 100 bp DNA Ladder, 1 kb DNA Ladder	
DNA Loading Dye Buffers	
Other Reagents: GC-rich Enhancer, 25 mM MgCl ₂ , PCR Grade Water	
Ordering	40
International Presence & Distributors	42
Product List	44



**SOLIS
BIODYNE**

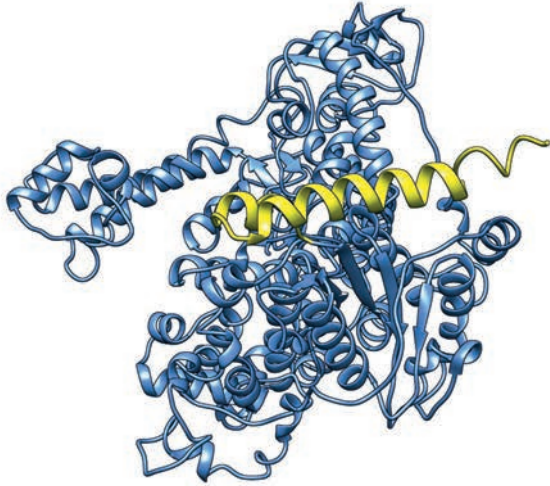


EXCLUSIVAS DE PASCUAL Y FURIO

C/ Islas Canarias n1 Pol. Ind. Fuente del Jarro
46988 Paterna, España
Teléfono: 961 34 37 45
Email: info@pascualyfurio.com; www.pascualyfurio.com
Del; Enrique Sevilla; **Tel:** 609223164;
Email:esevilla@pascualyfurio.com

Polypeptide Stabilization Technology: Stability TAG

3D MODEL OF FIREPOL® DNA POLYMERASE INCLUDING STABILITY TAG

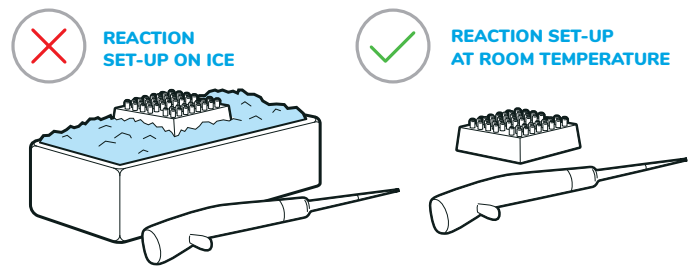


■ Taq DNA Polymerase ■ Stability TAG

Convenient reaction set-up

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

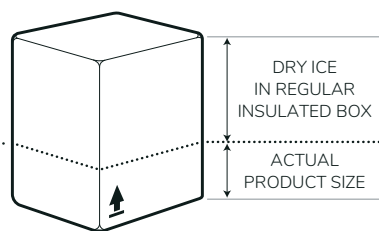
- Saves valuable bench space
- Convenient for high-throughput workflows
- No harm is done if you forget your enzymes out of fridge for weeks



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.

No need to pay for shipping the ice



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**
- **less fuel** used for transportation
- **lower shipping charges** for you
- **no additional regulations** for shipping and receiving the goods
- **accessible for all labs**

“ In May 2019 I got a free sample of HOT FIREPol® EvaGreen® Supermix at the Labvolution in Hannover. While unpacking my bag it slipped into the corner of a drawer and was unfortunately forgotten. So it stayed in the drawer in darkness at room temperature. I found it again in January 2020! So after 7 months without cooling. I gave it to my undergraduate students for a small lab project. They did a comparison of qPCR Mastermixes with our Illumina ECO on a Lambda DNA Template. The students found your 5xHotFirePol Supermix was working best of all! Even after that time of faulty storage. The results in sensitivity and reproducibility were very satisfying. ”

DIPL-ING CHRISTINA STEFFEN

Wissenschaftliche Mitarbeiterin,
Molekularbiologie

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).

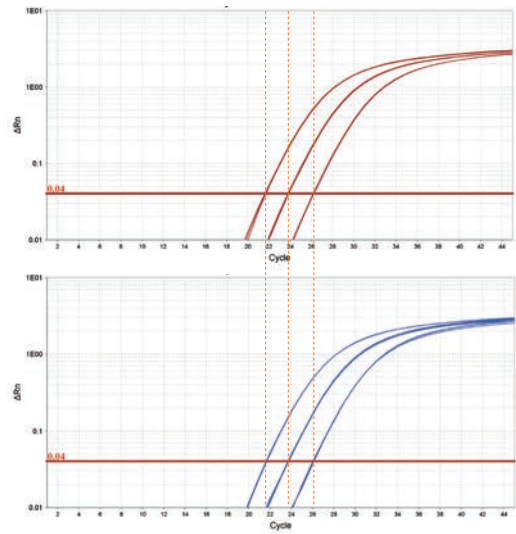
All our products can withstand 1 month at room temperature without detectable change in the performance of the product, which enables shipping our products without ice. The exceptional product stability is furthermore supported by our unique buffer composition.

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

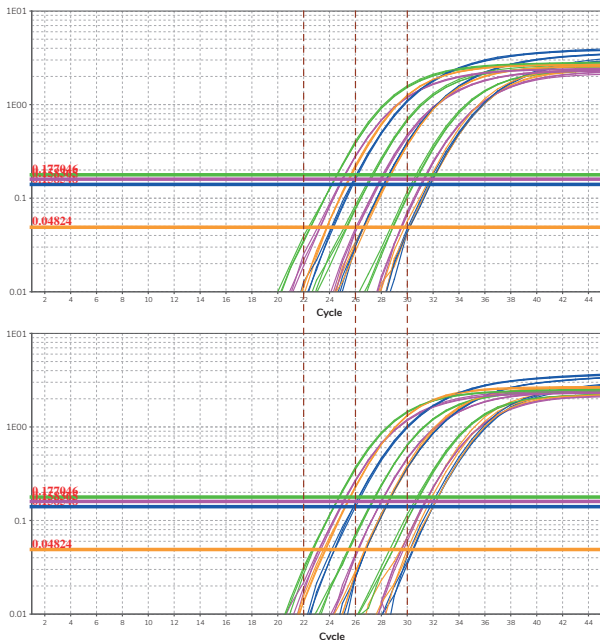
* Room temperature is 15-25°C according to "Guidelines for the Storage of Essential Medicines and Other Health Commodities", World Health Organization (2003)

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 -20°C (lower graph).



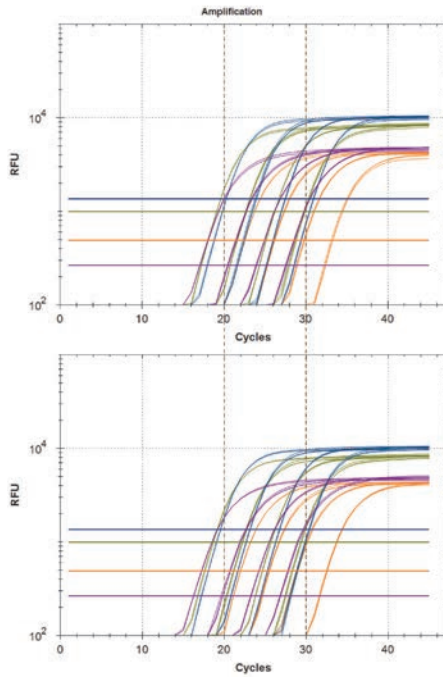
■ HOT FIREPol® Probe Universal qPCR Mix room temperature
 ■ HOT FIREPol® Probe Universal qPCR Mix -20°C



STABILITY OF SOLISFAST® DNA POLYMERASE

SolisFAST® Probe qPCR Mix (Purple) was used in 4-plex qPCR amplification with 3 tenfold serial dilutions of human gDNA (from 2 ng/μl to 0.02 ng/μl). Reactions were run on Applied BioSystems™ QuantStudio™ 6 Flex cycler using Purple dye for normalization. SolisFAST® Probe qPCR Mix (Purple) shows no loss of activity after incubation at room temperature for 1 month (upper graph) compared to storing at -20°C (lower graph).

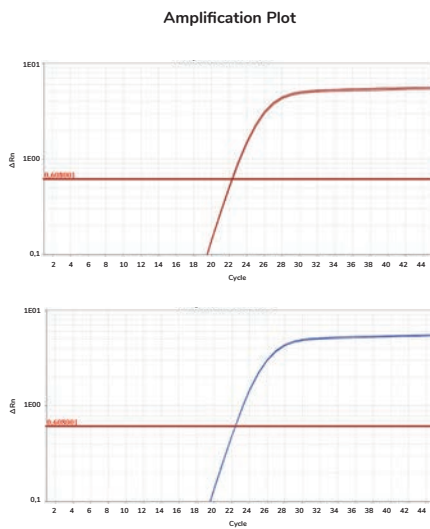
■ FAM ■ JUN ■ ABY ■ VIC



STABILITY OF SOLIScript® 1-STEP COV KIT

SOLIScript® 1-step CoV Kit contains 3 different polypeptides with Stability TAG – SOLIScript® RT, RiboGrip™ RNase inhibitor and HOT FIREPol® DNA Polymerase. The kit was used in a 4-plex qPCR experiment with 4 tenfold serial dilutions of human total RNA (from 4 ng/μl to 4 pg/μl). Reactions were run on Bio-Rad CFX96 qPCR platform. SOLIScript® 1-step CoV Kit shows no loss of activity after incubation at room temperature for 1 month (upper graph) compared to storing at -20°C (lower graph).

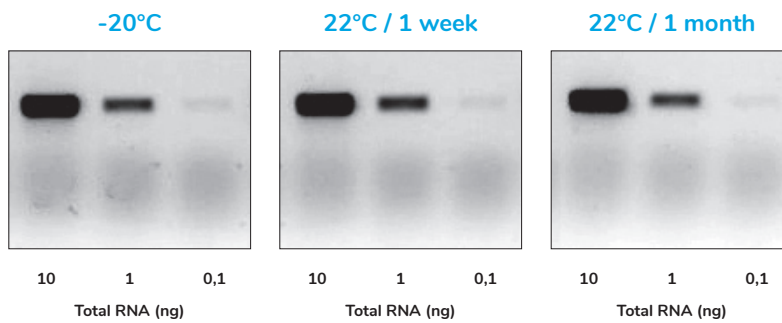
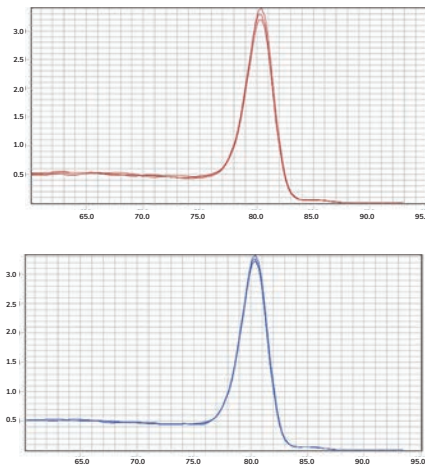
■ FAM ■ ROX ■ VIC ■ Cy5



STABILITY OF FIRESript® REVERSE TRANSCRIPTASE

STABILITY OF FIRESript® REVERSE TRANSCRIPTASE

Human total RNA (10 ng) was converted into cDNA using oligo-dT primers and FIRESript® RT (10 U/μl). Real-time PCR was performed using β2M primers and HOT FIREPol® EvaGreen® qPCR Mix Plus. There is no change in enzyme activity after incubation of FIRESript® RT at room temperature for 1 month (upper graphs) compared to storing at -20°C (lower graphs).



Human total RNA (10 ng, 1 ng and 0.1 ng) was converted into cDNA using oligo-dT primers and FIRESript® RT (10 U/μl) that had been stored at -20°C and at room temperature (22°C) for 1 week and for 1 month. PCR was performed using β2M primers and HOT FIREPol® Blend Master Mix.

Quality Control

Solis BioDyne's production and product development takes place in a state-of-the-art laboratory, under the supervision of experienced scientists and technicians.

To ensure the highest quality and lot-to-lot consistency, strict quality procedures are followed and documented at all stages of production. Certificates of Analysis (CoA) are available for each lot upon request.

ISO Certification

Quality has always been the core value of our work. To ensure we match the high-quality requirements of our partners in the research and diagnostic sector, we implemented the ISO 13485 standard in 2018 to complement the ISO 9001 certificate we acquired in 2007. Our ISO certificates ensure

- High-quality products
- Lot-to-lot consistency
- Supply chain security and traceability
- Manufacturing process consistency

Solis BioDyne Quality Management System is certified to ISO 13485:2016 and ISO 9001:2015 standards.



Product Format and Packaging

5x concentration

All Solis BioDyne PCR and qPCR mixes are produced in 5x-concentrated solutions to improve stability. The higher buffer concentration also leaves 2.5 times more room for your template and primers compared with 2x mixes. This is highly advantageous when working with low-concentration DNA samples or performing multiplex assays.

Light-protective packaging

Fluorescent dyes EvaGreen®, SolisGreen®, and passive reference dyes (ROX, Purple) are sensitive to degradation by light. Solis BioDyne qPCR mixes that contain these dyes are supplied in special dark vials to minimize light exposure during transportation and reaction set-up.



COMPARISON OF OUR 5X MASTER MIX TO A STANDARD 2X MASTER MIX

	Vial size	Reactions (20 µl final volume)
2x Standard Master Mix	1 ml	100 rxn
5x Solis BioDyne Master Mix	1 ml	250 rxn

» Get 2.5x more reactions done with same volume of PCR/qPCR Mix

Update in Product Format

In 2020, we have implemented several changes in the product presentation, such as a new tube design, updated Data Sheet design and content, tube labelling, etc. For example, you will notice that all of our PCR and qPCR master mixes will no longer have "5x" (reference to product concentration) in front of the product name, in order to align with market standards and reduce mistakes in ordering.

In 2021, we will continue updating product technical documentation, as well as outer packaging and labelling. To avoid waste of materials already in stock, we will implement the updated designs gradually. This means that for our customers, you may receive some products still in the old packaging, as they are phased out of production.

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)
NEW! SolisFAST[®] Master Mix	●			1x	5 kb	3'A	***	*	***	7-8
NEW! SolisFAST[®] Master Mix Ready To Load	●	●		1x	5 kb	3'A	***	*	***	7-8
NEW! SolisFAST[®] Master Mix with UNG	●		●	1x	5 kb	3'A	***	*	***	7-8
NEW! SolisFAST[®] Master Mix with UNG Ready To Load	●	●	●	1x	5 kb	3'A	***	*	***	7-8
HOT FIREPol[®] Multiplex Mix	●			1x	5 kb	3'A	*	*	***	9
HOT FIREPol[®] Multiplex Mix Ready To Load	●	●		1x	5 kb	3'A	*	*	***	9
HOT FIREPol[®] Blend Master Mix	●			5x	5 kb	3'A/ Blunt	*	*	*	10-11
HOT FIREPol[®] Blend Master Mix Ready To Load	●	●		5x	5 kb	3'A/ Blunt	*	*	*	10-11
HOT FIREPol[®] GC Master Mix	●			1x	5 kb	3'A	*	***	*	12
FIREPol[®] Master Mix				1x	5 kb	3'A	*	*	*	13
FIREPol[®] Master Mix Ready To Load		●		1x	5 kb	3'A	*	*	*	13
HOT FIREPol[®] DNA Polymerase	●			1x	5 kb	3'A	*	**	**	14
FIREPol[®] DNA Polymerase				1x	5 kb	3'A	*	**	**	15

^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 Solis FAST 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

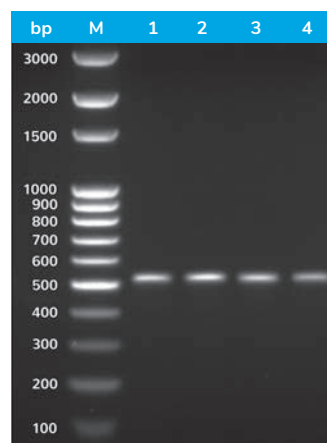
UMR ECOlogie des FORêts de Guyane (ECOFOG)



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
SolisFAST® Master Mix	24-01-0000S (free sample)	50	0.2
	24-01-00001	250	1
	24-01-00001-5	5 x 250	5 x 1
	24-01-00020	5000	20
SolisFAST® Master Mix Ready To Load	24-02-0000S (free sample)	50	0.2
	24-02-00001	250	1
	24-02-00001-5	5 x 250	5 x 1
	24-02-00020	5000	20
SolisFAST® Master Mix with UNG	24-21-0000S (free sample)	50	0.2
	24-21-00001	250	1
	24-21-00001-5	5 x 250	5 x 1
	24-21-00020	5000	20
SolisFAST® Master Mix with UNG Ready To Load	24-22-0000S (free sample)	50	0.2
	24-22-00001	250	1
	24-22-00001-5	5 x 250	5 x 1
	24-22-00020	5000	20

Products and samples

can be ordered via **e-mail**: orders@solisbiodyne.com, via **skype**: [solis.biodyne](https://www.skype.com/en/contacts/biodyne), via **phone**: +372 740 9960, or via our **e-shop**: [solisbiodyne.com](https://www.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**

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

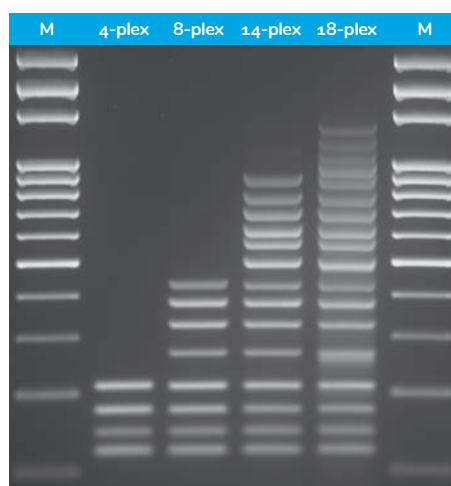
Head of the laboratory
Microsynth, Switzerland

Selected publications:

- Bangratz, M. et al., PLoS One. (2020)

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.



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
HOT FIREPol® MultiPlex Mix with 10 mM MgCl ₂	04-34-00S20 (free sample)	25	0.1
	04-34-00120	250	1
	04-34-02020	5000	20
HOT FIREPol® MultiPlex Mix Ready To Load with 10 mM MgCl ₂	04-36-00S20 (free sample)	25	0.1
	04-36-00120	250	1
	04-36-02020	5000	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 FIREPoI® 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 FIREPoI® this master mix contains a proofreading enzyme which offers enhanced fidelity and performance. The mix has regular and Ready To Load version and different MgCl₂ 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 FIREPoI Blend Master Mix is convenient to use, store and produces high quality results. I know what I am saying because it outperforms some products from other companies. ”

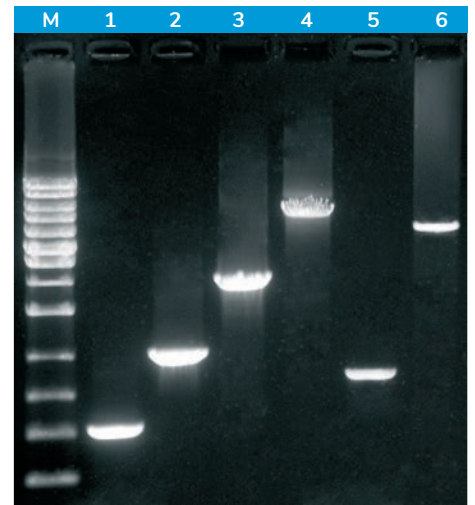
EMMY CHEPKOECH

PhD student

University of Eldoret, Kenya

AMPLICONS OF VARIOUS LENGTH FROM DIFFERENT TEMPLATES

Lines 1-4 present an excellent amplification of fragments of various length from λ DNA. Lines 5 and 6 show two different amplicons amplified from mouse genomic DNA. All these reactions were carried out using HOT FIREPoI® Blend Master Mix Ready To Load with 7.5 mM MgCl₂.



Lane	Template	Amplicon Length
1	λ DNA	499 bp
2	λ DNA	1003 bp
3	λ DNA	1998 bp
4	λ DNA	4991 bp
5	Mouse genomic DNA	808 bp
6	Mouse genomic DNA	3838 bp

Selected publications:

- Herren, J.K. et al., Nat. Commun. (2020)
- Pent, M. et al., ISME J. (2020)
- Popovici, J. et al., Nat. Commun. (2020)
- Bahram, M. et al., New Phytol. (2020)
- Roesch, C. et al., J. Antimicrob. Chemother. (2020)
- Prakash, C. et al., Sci. Rep. (2020)
- Piirsoo, A. et al., J. Virol. (2020)

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	SIZE in ml
HOT FIREPol® Blend Master Mix with 7.5 mM MgCl ₂	04-27-00S15 (free sample)	25	0.1
	04-27-00115	250	1
	04-27-02015	5000	20
HOT FIREPol® Blend Master Mix with 10 mM MgCl ₂	04-27-00S20 (free sample)	25	0.1
	04-27-00120	250	1
	04-27-02020	5000	20
HOT FIREPol® Blend Master Mix with 12.5 mM MgCl ₂	04-27-00S25 (free sample)	25	0.1
	04-27-00125	250	1
	04-27-02025	5000	20

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	SIZE in ml
HOT FIREPol® Blend Master Mix Ready To Load with 7.5 mM MgCl ₂	04-25-00S15 (free sample)	25	0.1
	04-25-00115	250	1
	04-25-02015	5000	20
HOT FIREPol® Blend Master Mix Ready To Load with 10 mM MgCl ₂	04-25-00S20 (free sample)	25	0.1
	04-25-00120	250	1
	04-25-02020	5000	20
HOT FIREPol® Blend Master Mix Ready To Load with 12.5 mM MgCl ₂	04-25-00S25 (free sample)	25	0.1
	04-25-00125	250	1
	04-25-02025	5000	20

Products and samples

can be ordered via e-mail: orders@solisbiodyne.com, via skype: [solis.biodyne](https://www.skype.com/en/contacts/biodyne), via phone: +372 740 9960, or via our e-shop: [solisbiodyne.com](https://www.solisbiodyne.com)

HOT FIREPoI® GC Master Mix

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 FIREPoI® and allows amplification of up to 5 kb DNA templates. Separate tubes of 25 mM MgCl₂ 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 MgCl₂ enable **flexibility** in reaction optimization
- reaction set-up and shipment **without ice**

Did you know?

GC-rich templates need a special PCR master mix because GC-rich DNA is more difficult to amplify. It forms stable secondary structures that are more resistant to denaturing and may cause unspecific amplification.

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

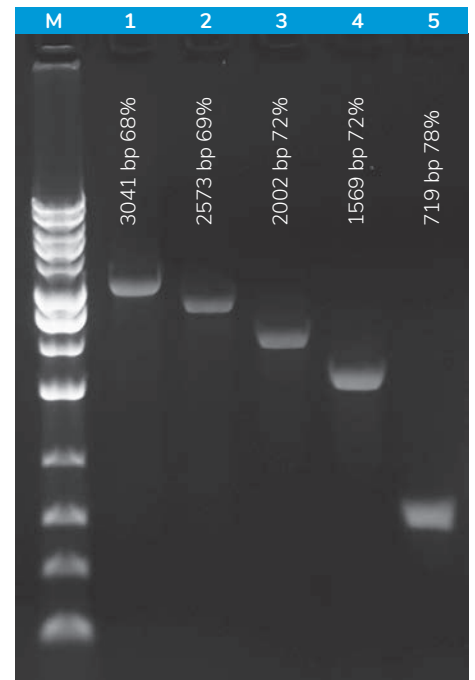
AMPLICONS OF VARIOUS GC-CONTENT

12 GC-rich genes were amplified from human gDNA using HOT FIREPoI® GC Master Mix. 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 FIREPoI® GC Master Mix. 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.



Selected publications:

- Nahrung, H.F. et al., Austral Entomol. (2020)
- O'Callahan, D. et al., Curr. Microbiol. (2020)

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 μl	SIZE in ml
HOT FIREPoI® GC Master Mix	04-33-00S15 (free sample)	25	0.1
	04-33-00115	250	1
	04-33-02015	5000	20

Products and samples

can be ordered via **e-mail:** orders@solisbiodyne.com, via **skype:** [solis.biodyne](https://www.skype.com/name/solis.biodyne), via **phone:** +372 740 9960, or via our **e-shop:** [solisbiodyne.com](https://www.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**

Researchers already trust FIREPol® Master Mix

Reference:

“ We are working with FIREPol® Master Mix for few years now and we are very satisfied. We are using it for genotyping (many different PCR) and we have excellent results. The Ready To Load format is very time saving. ”

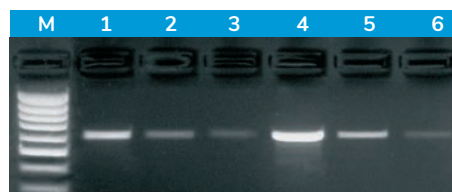
CLAUDINE CORNELOUP

Engineer assistant

Platform for Experimental Biology on Mice,
Genotyping Laboratory, ENS de Lyon, France

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:

- Touray, A.O. et al., Sci. Rep. (2020)
- Hassan, J. et al., Microorganisms. (2020)
- Richards-Rios, P. et al., Appl. Environ. Microbiol. (2020)
- Bielik, V. et al., Ann. Nutr. Metab. (2020)
- Yehia, H.M. et al., J. Dairy Sci. (2020)
- Furlanis, E. et al., Nat. Neurosci. (2019)
- Li, N. et al., J. Endocrinol. (2019)

Did you know?

MgCl₂ acts as a cofactor and is a catalyzer in PCR reaction. Mg²⁺ ions bind to the catalytic site of the DNA polymerase and catalyze phosphodiester bond formation between the two dNTPs.

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 μl	SIZE in ml
FIREPol® Master Mix with 7.5 mM MgCl ₂	04-11-00S15 (free sample) 04-11-00115	25 250	0.1 1
FIREPol® Master Mix with 12.5 mM MgCl ₂	04-11-00S25 (free sample) 04-11-00125	25 250	0.1 1
FIREPol® Master Mix Ready To Load with 7.5 mM MgCl ₂	04-12-00S15 (free sample) 04-12-00115	25 250	0.1 1
FIREPol® Master Mix Ready To Load with 12.5 mM MgCl ₂	04-12-00S25 (free sample) 04-12-00125	25 250	0.1 1

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

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 is supplied with 2 reaction buffers, 25 mM MgCl₂ 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
- **MgCl₂** 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.

Researchers already trust HOT FIREPol®

Reference:

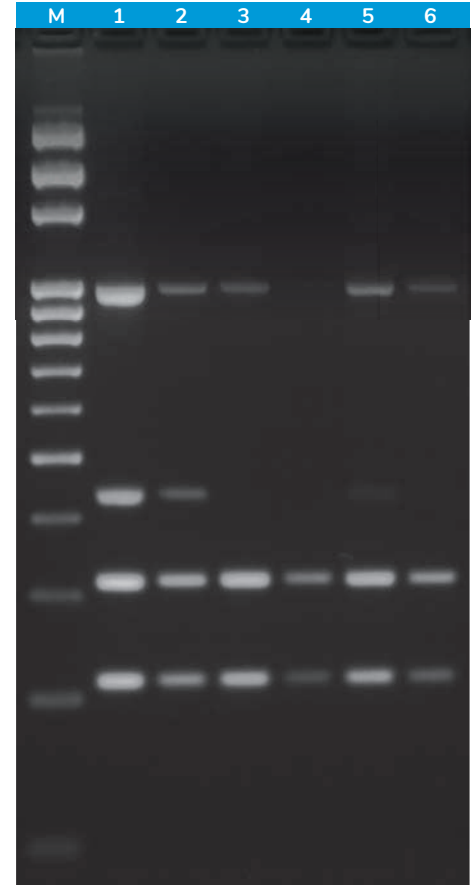
“ We had some problems with the implementation of a protocol, we tried for a long time with different enzymes without any positive results. We tested the HOT FIREPol® and it was the perfect troubleshooting, besides the great technical support received from Solis BioDyne. ”

DR MARIA JOSE SUAREZ

CIHATA, University of Costa Rica

HIGHLY COMPETITIVE

Four fragments from human gDNA were amplified in multiplex reaction using HOT FIREPol® DNA Polymerase (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.



Selected publications:

- Delavaux, C.S. et al., ISME J. (2020)
- Kavazović, I. et al., PLOS Biol. (2020)
- Kamboj, N. et al., Mater. Sci. Eng. C. (2020)
- Amorim, J.P. et al., Cell Rep. (2020)
- Kluckova, D. et al., Sci. Rep. (2020)
- Schreurs, R.R.C.E. et al., Immunity. (2019)
- Tessema, S.K. et al., Cell Host Microbe. (2019)
- Stavusis, J. et al., Ann. Neurol. (2019)

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	SIZE in U
HOT FIREPol® DNA Polymerase (5 U/μl)	01-02-0000S (free sample)	100
	01-02-00500	500
	01-02-01000	1000

Products and samples

can be ordered via **e-mail:** orders@solisbiodyne.com, via **skype:** [solis.biodyne](https://www.skype.com/join/solis.biodyne), via **phone:** +372 740 9960, or via our **e-shop:** [solisbiodyne.com](https://www.solisbiodyne.com)

FIREPol® DNA Polymerase

Description

A genetically modified thermostable Taq DNA polymerase that provides robust and reproducible results. FIREPol® DNA polymerase is supplied with 2 reaction buffers, 25 mM MgCl₂ 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
- **MgCl₂** 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

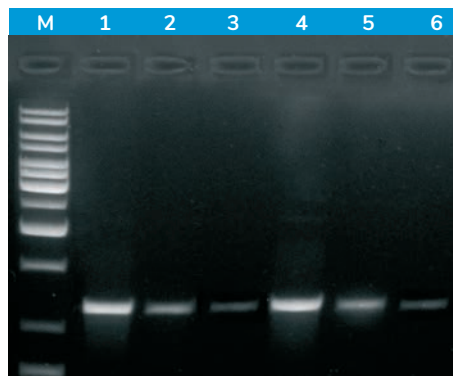
School of Biochemistry and Cell Biology
University College Cork, Ireland

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:

- Sadek, M. et al., Antimicrob. Agents Chemother. (2020)
- Rodriguez-Campos, S. et al., Sci. Rep. (2020)
- Barna, L. et al., Fluids Barriers CNS. (2020)
- Šeligová, B. et al., Helicobacter. (2020)
- Doma, A.O. et al., Antibiotics. (2020)
- Hummitzsch, L. et al., Stem Cells Int. (2019)
- Chanchaithong, P. et al., J. Antimicrob. Chemother. (2019)
- Müller, P. et al., RNA Biol. (2019)

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	SIZE in U
FIREPol® DNA Polymerase (5 U/μl)	01-01-0000S (free sample)	100
	01-01-00500	500
	01-01-01000	1000
	01-01-02000	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
NEW! SolisFAST® SolisGreen® qPCR Mix	***	**	*			18
HOT FIREPol® SolisGreen® qPCR Mix	*	***	*			19
HOT FIREPol® EvaGreen® qPCR Supermix	*	**	***	●	●	20
HOT FIREPol® EvaGreen® qPCR Mix Plus	*	*	*			21
HOT FIREPol® EvaGreen® HRM Mix	*	***	*			22

For Cycler Compatibility, please check qPCR Mix compatibility table for dye-based mixes on page 17.

Mixes for probe-based qPCR assays

	Speed	GC-rich performance	Multiplex qPCR	dUTP	UNG	Page
NEW! SolisFAST® Probe Mix	***	*	≤ 5 targets			24-25
NEW! SolisFAST® Probe Mix with UNG*	***	*	≤ 5 targets	●	●	24-25
HOT FIREPol® Probe Multiplex qPCR Mix	*	***	≤ 4 targets	●		26
HOT FIREPol® Probe Universal qPCR Mix	*	***	≤ 2 targets	●		27
HOT FIREPol® Probe qPCR Mix Plus	*	*	≤ 2 targets			28

* SolisFAST® Probe qPCR Mixes with UNG available upon request.

For cycler compatibility, please check qPCR mix compatibility table for probe-based mixes on page 23.

qPCR Mix Compatibility Table: Dye-based qPCR Mixes

	Fast cycling		Standard cycling					HRM	
	SolisFAST® SolisGreen® qPCR Mix (no ROX)	SolisFAST® SolisGreen® qPCR Mix (ROX)	HOT FIREPol® SolisGreen® qPCR Mix	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

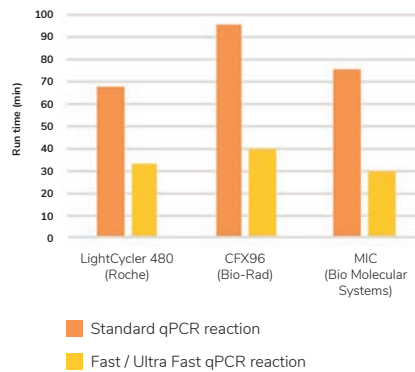
Fast and sensitive ready-to-use 5x-concentrated solution for dye-based qPCR detection of DNA targets using SolisGreen® dsDNA intercalating dye and SYBR®/FAM detection channel. The mix contains a novel SolisFAST® DNA Polymerase with fast hot-start and 2-4 times faster extension rates (15-30 sec/kb) compared 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**

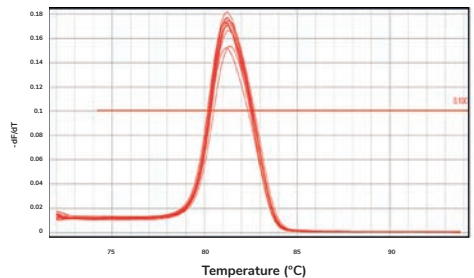
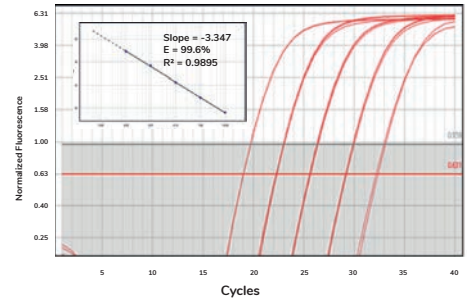
RESULTS IN 30 MINUTES!

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



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.



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
SolisFAST® SolisGreen® qPCR Mix (no ROX)	28-41-0000S (free sample)	50	0.2
	28-41-00001	250	1
	28-41-00001-5	5 x 250	5 x 1
	28-41-00020	5000	20
SolisFAST® SolisGreen® qPCR Mix (ROX)	28-46-0000S (free sample)	50	0.2
	28-46-00001	250	1
	28-46-00001-5	5 x 250	5 x 1
	28-46-00020	5000	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

Description

A highly sensitive ready-to-use 5x reaction mix for dye-based qPCR detection of DNA targets using SolisGreen® dsDNA intercalating dye and SYBR®/FAM detection channel. The mix has excellent performance with low template amounts. It contains an internal reference based on ROX dye and 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

- enhanced performance with **low DNA** concentrations
- bright and sensitive **SolisGreen® dye**
- suitable for **commercial** applications
- one qPCR mix for all cyclers, except high ROX
- reaction set-up and shipment **without ice**

Researchers already trust SolisGreen®

Reference:

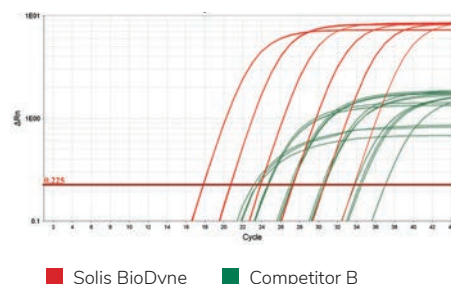
“ Excellent product quality along with affordable prices and committed customer service: these are the reasons why Solis BioDyne is our strategic enzyme supplier since many years. Now we continue our partnership with the robust, stable and very sensitive SolisGreen mixes for our qPCR product platform.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

DAVIDE ROASCHIO

Scientist in Product Development
Loewe Biochemica GmbH, Germany

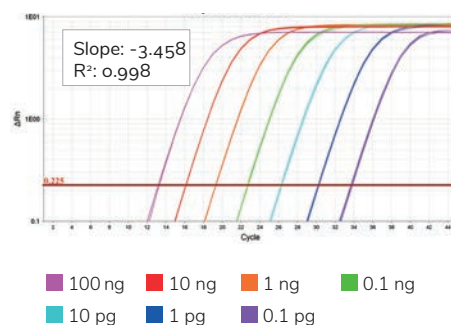
HIGHLY COMPETITIVE

Amplification of six tenfold dilutions of human GAPDH cDNA with HOT FIREPol® SolisGreen® qPCR Mix (red) and a qPCR mix from another vendor (green). Reactions were performed on an Applied BioSystems™ QuantStudio™ 6 Flex.



EXCELLENT SENSITIVITY

Amplification of human PPIA cDNA with HOT FIREPol® SolisGreen® qPCR Mix on an Applied BioSystems™ QuantStudio™ 6 Flex shows excellent linearity across different DNA concentrations. The amount of cDNA per reaction ranges from 100 ng to 0.1 pg.



Did you know?

Compared to SYBR® Green I, our next generation dyes SolisGreen® and EvaGreen® have:

- higher fluorescence level
- higher sensitivity for detecting low template concentrations
- higher stability

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	SIZE in ml
HOT FIREPol® SolisGreen® qPCR Mix	08-46-0000S (free sample)	50	0.2
	08-46-00001	250	1
	08-46-00008	2000	8
	08-46-00020	5000	20

Products and samples

can be ordered via e-mail: orders@solisbiodyne.com, via skype: [solis.biodyne](https://www.skype.com/join/solis.biodyne), via phone: +372 740 9960, or via our e-shop: [solisbiodyne.com](https://www.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 low and high ROX level for signal normalization.

Benefits

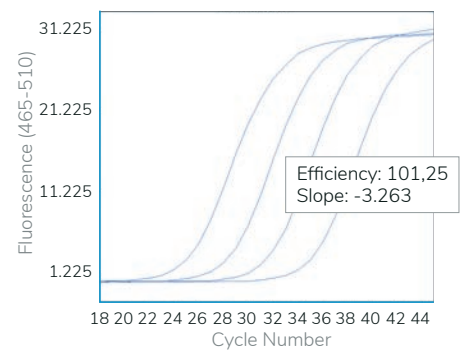
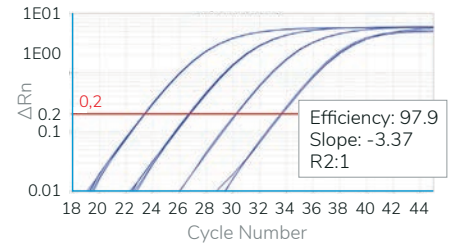
- high sensitivity with **low DNA** concentrations
- robust amplification of **GC-rich** targets
- **blue visualization dye** to ease pipetting
- reduced **primer dimer** formation
- contains **dUTP** to prevent cross-contamination when used in combination with UNG
- one qPCR mix for all cyclers (except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

Selected publications:

- Hégarat, N. et al., EMBO J. (2020)
- Santa-Marinha, L. et al., Cell Rep. (2020)
- Dahlem, C. et al., Cancers (Basel). (2020)
- Valbuena Perez, J.V. et al., Aging Cell. (2020)
- Vaid, R. et al., Nucleic Acids Res. (2020)
- Ventura, R.D. et al., Free Radic. Biol. Med. (2020)
- Carfagna, I.E. et al., Mol. Immunol. (2020)
- Roesch, C. et al., J. Antimicrob. Chemother. (2020)
- Singh, R.K. et al., Int. J. Mol. Sci. (2020)
- Pasin, F. et al., Plant Commun. (2020)
- Noelia, M. et al., Biochem. Pharmacol. (2020)

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.

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	SIZE in ml
HOT FIREPol® EvaGreen® qPCR Supermix	08-36-0000S (free sample)	50	0.2
	08-36-00001	250	1
	08-36-00008	2000	8
	08-36-00020	5000	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 FIREPoI® 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

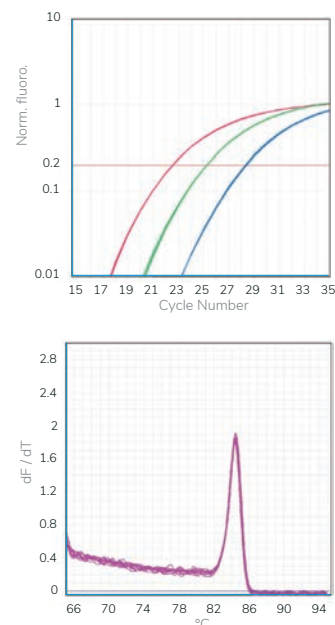
- **cost-effective** solution for less demanding assays
- suitable for most dye-based applications
- high **sensitivity** and **specificity**
- excellent **efficiency**
- compatible with most cyclers
- different product versions: no ROX, ROX, capillary
- reaction set-up and shipment **without ice**

Selected publications:

- Hégarat, N. et al., EMBO J. (2020)
- Santa-Marinha, L. et al., Cell Rep. (2020)
- Dahlem, C. et al., Cancers (Basel). (2020)
- Valbuena Perez, J.V. et al., Aging Cell. (2020)
- Vaid, R. et al., Nucleic Acids Res. (2020)
- Ventura, R.D. et al., Free Radic. Biol. Med. (2020)
- Carfagna, I.E. et al., Mol. Immunol. (2020)
- Roesch, C. et al., J. Antimicrob. Chemother. (2020)
- Singh, R.K. et al., Int. J. Mol. Sci. (2020)
- Pasin, F. et al., Plant Commun. (2020)
- Noelia, M. et al., Biochem. Pharmacol. (2020)

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 FIREPoI® 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.



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.

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	SIZE in ml
HOT FIREPoI® EvaGreen® qPCR Mix Plus (ROX)	08-24-0000S (free sample)	50	0.2
	08-24-00001	250	1
	08-24-00008	2000	8
	08-24-00020	5000	20
HOT FIREPoI® EvaGreen® qPCR Mix Plus (no ROX)	08-25-0000S (free sample)	50	0.2
	08-25-00001	250	1
	08-25-00008	2000	8
	08-25-00020	5000	20
HOT FIREPoI® EvaGreen® qPCR Mix Plus (Capillary)	08-26-0000S (free sample)	50	0.2
	08-26-00001	250	1
	08-26-00008	2000	8
	08-26-00020	5000	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?

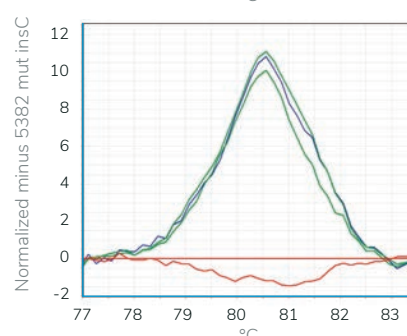
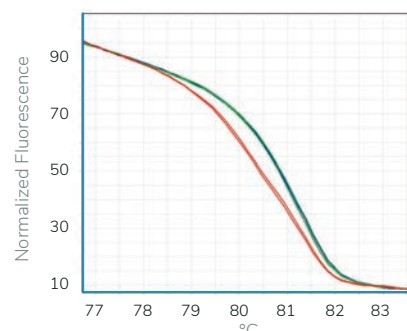
High resolution melt analysis can be used for SNP genotyping, discovering mutations, screening for heterozygosity, analyzing DNA methylation.

Selected publications:

- Hégarat, N. et al., EMBO J. (2020)
- Santa-Marinha, L. et al., Cell Rep. (2020)
- Dahlem, C. et al., Cancers (Basel). (2020)
- Valbuena Perez, J.V. et al., Aging Cell. (2020)
- Vaid, R. et al., Nucleic Acids Res. (2020)
- Ventura, R.D. et al., Free Radic. Biol. Med. (2020)
- Carfagna, I.E. et al., Mol. Immunol. (2020)
- Roesch, C. et al., J. Antimicrob. Chemother. (2020)
- Singh, R.K. et al., Int. J. Mol. Sci. (2020)
- Pasin, F. et al., Plant Commun. (2020)
- Noelia, M. et al., Biochem. Pharmacol. (2020)

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	Blue	Unknown phenotype	5382 wt	99.18
40	Green	Wildtype 1	5382 wt	97.33
41	Green	Wildtype 2	5382 wt	100.00
42	Red	Mutation 1	5382 mut insC	100.00
43	Red	Mutation 2	5382 mut insC	97.47

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	SIZE in ml
HOT FIREPol® EvaGreen® HRM Mix (ROX)	08-33-0000S (free sample)	50	0.2
	08-33-00001	250	1
	08-33-00008	2000	8
	08-33-00020	5000	20
HOT FIREPol® EvaGreen® HRM Mix (no ROX)	08-31-0000S (free sample)	50	0.2
	08-31-00001	250	1
	08-31-00008	2000	8
	08-31-00020	5000	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 (ROX)*	HOT FIREPol® Multiplex qPCR Mix	HOT FIREPol® Multiplex qPCR Mix (ROX)*	HOT FIREPol® Multiplex qPCR Mix (Purple)**	HOT FIREPol® Probe Universal qPCR Mix*	HOT FIREPol® Probe qPCR Mix Plus (no ROX)	HOT FIREPol® Probe qPCR Mix Plus (ROX)*	HOT FIREPol® Probe qPCR Mix Plus (Capillary)
Applied Biosystems									
5700, 7000, 7300, 7700, 7900HT, 7900HT Fast, StepOne™, StepOnePlus™		●		●		●		●	
7500, 7500 Fast, ViiATM7, QuantStudio™ 3**, 5, 6 Flex, 7 Flex, 12K Flex		●		●	●	●		●	
Agilent/Stratagene									
Mx3000PTM, Mx3005PTM, Mx4000TM		●		●		●		●	
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 and/or with UNG enzyme are 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 upon request to prevent carry-over contamination.

Benefits

- qPCR results **2x faster**
- fast hot-start (30 sec-3 min)
- fast amplification (15-30 sec/kb)
- 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**

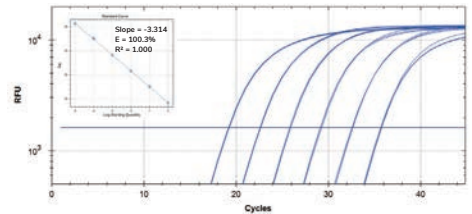
Did you know?

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



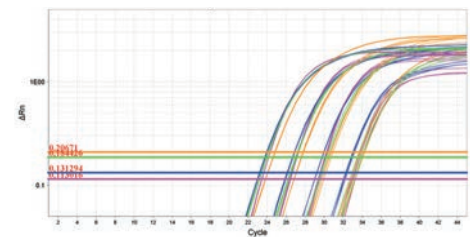
ACCURATE AND SENSITIVE qPCR

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.



■ FAM ■ ABY ■ VIC ■ Cy5

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
SolisFAST® Probe qPCR Mix (no ROX)	28-01-0000S (free sample)	50	0.2
	28-01-00001	250	1
	28-01-00001-5	5 x 250	5 x 1
	28-01-00020	5000	20
SolisFAST® Probe qPCR Mix (ROX)	28-02-0000S (free sample)	50	0.2
	28-02-00001	250	1
	28-02-00001-5	5 x 250	5 x 1
	28-02-00020	5000	20
SolisFAST® Probe qPCR Mix (Purple)**	28-03-0000S (free sample)	50	0.2
	28-03-00001	250	1
	28-03-00001-5	5 x 250	5 x 1
	28-03-00020	5000	20

* SolisFAST® Probe qPCR Mixes with UNG available upon request

** SolisFAST® Probe qPCR Mixes with Purple dye available upon request

Products and samples

can be ordered via **e-mail**: orders@solisbiodyne.com, via **skype**: [solis.biodyne](https://www.skype.com/en/contacts/biodyne), via **phone**: +372 740 9960, or via our **e-shop**: [solisbiodyne.com](https://www.solisbiodyne.com)

HOT FIREPoI® 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

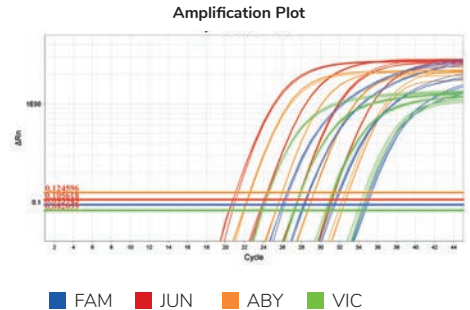
- analyze **1-4 targets** in 1 reaction
- high **specificity** and **sensitivity**
- robust amplification of **GC-rich** targets
- contains **dUTP** to prevent carry-over contamination when used in combination with UNG
- compatible with most cyclers (see table on page 23)
- different product versions: 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.

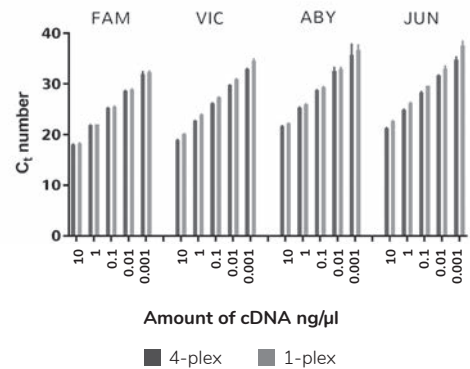
EXCELLENT FOR 4-PLEX ASSAYS

HOT FIREPoI® 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 FIREPoI® 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
HOT FIREPoI® Multiplex qPCR Mix	08-01-0000S (free sample)	50	0.2
	08-01-00001	250	1
	08-01-00008	2000	8
	08-01-00020	5000	20
HOT FIREPoI® Multiplex qPCR Mix (ROX)*	08-02-0000S (free sample)	50	0.2
	08-02-00001	250	1
	08-02-00008	2000	8
	08-02-00020	5000	20
HOT FIREPoI® Multiplex qPCR Mix (Purple)*	08-03-0000S (free sample)	50	0.2
	08-03-00001	250	1
	08-03-00008	2000	8
	08-03-00020	5000	20

* See the passive reference dye and probe reporter dye compatibility table on page 31.

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 Mix

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

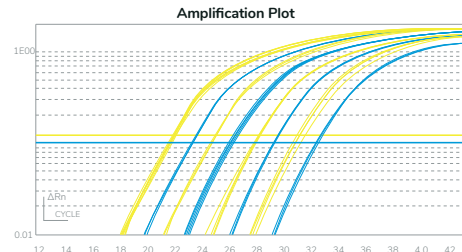
Supplied by Sinapse Biotecnologia

Selected publications:

- Zurawek, M. et al., J. Immunol. Res. (2020)
- Okino, C.H. et al., Vet. Immunol. Immunopathol. (2020)
- Giglioti, R. et al., Exp. Appl. Acarol. (2019)
- Lettlova, S. et al., Cell. Physiol. Biochem. (2018)

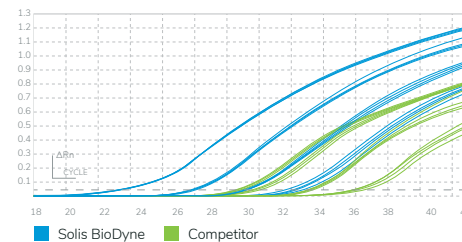
qPCR PERFORMANCE IN A DUPLEX REACTION:

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). BAI3P3 (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 amplified 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
HOT FIREPol® Probe Universal qPCR Mix	08-17-0000S (free sample)	50	0.2
	08-17-00001	250	1
	08-17-00008	2000	8
	08-17-00020	5000	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 FIREPoI® 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!

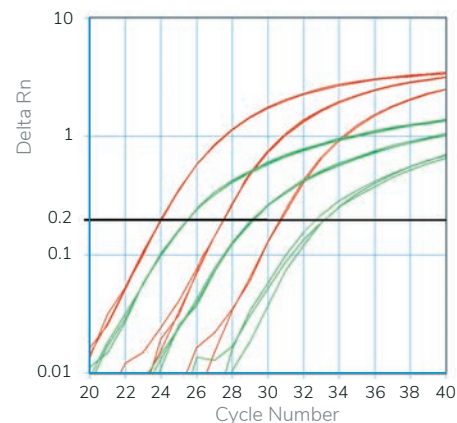
Melting temperature (T_m) of the probe should be 6 – 8°C higher than the T_m of the primers.

Selected publications:

- Gentiluomo, M. et al., Cancer Epidemiol. Biomarkers Prev. (2020)
- Tóth, F. et al., Bone. (2020)
- Kalynovska, N. et al., J. Cell. Mol. Med. (2020)
- Celik Uzuner, S., Anal. Biochem. (2020)
- Balounová, K. et al., Mech. Ageing Dev. (2020)
- Piasecka, J. et al., Mol. Ther. - Nucleic Acids. (2019)
- Harro, J. et al., Neuropharmacology. (2019)

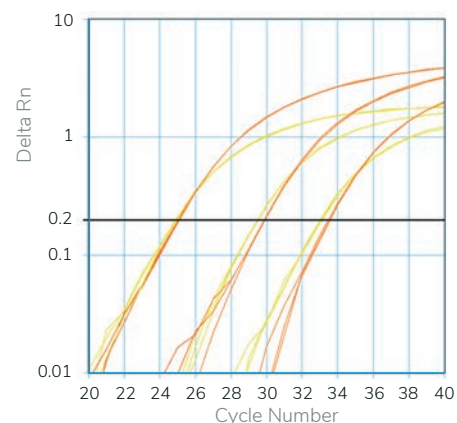
HIGHLY COMPETITIVE

Three tenfold dilutions of 72 bp fragment of albumin gene were amplified from human genomic DNA using HOT FIREPoI® 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 FIREPoI® 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
HOT FIREPoI® Probe qPCR Mix Plus (ROX)	08-14-0000S (free sample)	50	0.2
	08-14-00001	250	1
	08-14-00008	2000	8
	08-14-00020	5000	20
HOT FIREPoI® Probe qPCR Mix Plus (no ROX)	08-15-0000S (free sample)	50	0.2
	08-15-00001	250	1
	08-15-00008	2000	8
	08-15-00020	5000	20
HOT FIREPoI® Probe qPCR Mix Plus (Capillary)	08-16-0000S (free sample)	50	0.2
	08-16-00001	250	1
	08-16-00008	2000	8
	08-16-00020	5000	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, improved 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 compatible with wide range of reaction temperatures.

Benefits

- stable at room temperature for **30 days**
- suitable for working between **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

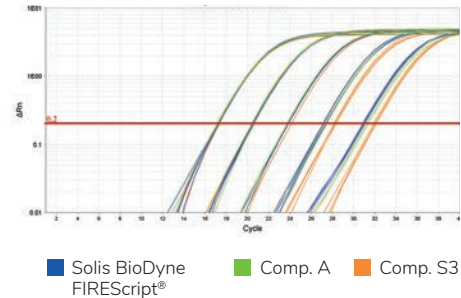
Research technician

University of Basel, Switzerland

Supplied by LucernaChem AG

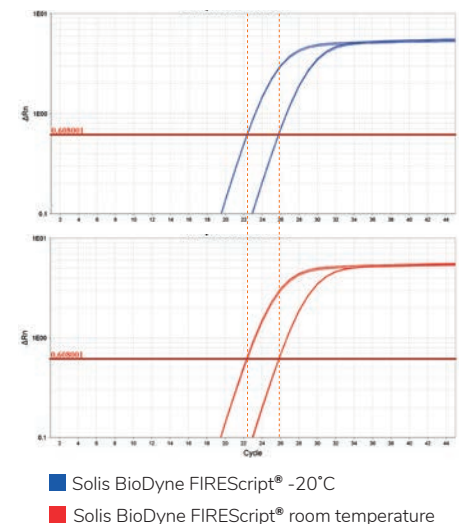
HIGHLY COMPETITIVE ENZYME

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.



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.



Selected publications:

- Reshi, Q.U.A. et al., J. Cell Commun. Signal. (2020)
- Arbués, A. et al., PLOS Pathog. (2020)
- Kalamon, N. et al., Biochem. Biophys. Res. Commun. (2020)
- Reimann, E. et al., Sci. Rep. (2019)
- Taherian-Esfahani, Z. et al., J. Cell. Physiol. (2019)
- Fallah, H. et al., Sci. Rep. (2019)

Send your sample request to orders@solisbiodyne.com			
PRODUCT	KIT COMPONENTS	CAT. NO.	RXN/20 μ l
FIREScript® RT cDNA synthesis MIX*	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • 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**	<ul style="list-style-type: none"> • 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**	<ul style="list-style-type: none"> • 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**	<ul style="list-style-type: none"> • 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.

Product Selection Guide: One-step RT-(q)PCR

		No. of targets per reaction	GC-rich templates	dUTP	Passive reference dye	Compatible cyclers	Incompatible probe reporter dyes	Page
Dye-based detection	SOLIScript® 1-step SolisGreen® Kit	1	*		ROX	no ROX and low-ROX cyclers		32
	SOLIScript® 1-step CoV Kit ^a	1-4	*		None	All cyclers	None	33
Probe-based detection	SOLIScript® 1-step Multiplex Probe Kit	1-4	***	●	None	All cyclers except Applied BioSystems™ and Agilent	None	34
	SOLIScript® 1-step Multiplex Probe Kit (ROX)	1-4	***	●	ROX	Applied BioSystems™ and Agilent cyclers	ROX JUN Texas Red	34
	SOLIScript® 1-step Multiplex Probe Kit (Purple)	1-4	***	●	Purple	Applied BioSystems™ cyclers with Mustang Purple™ channel	Cy5	34
	SOLIScript® 1-step Probe Kit	1-2	*	●	ROX	All cyclers	ROX JUN Texas Red	35
Endpoint detection	Coming soon! 1-step RT-PCR Kit					-	-	-

^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

Description

A convenient and sensitive kit for analysis of RNA targets and performing cDNA synthesis and dye-based qPCR in a single tube using SolisGreen® dsDNA intercalating dye and SYBR®/FAM detection channel. The Kit includes 3 components: a 40x One-step SOLIScript® Mix for cDNA synthesis, a 5x One-step SolisGreen® Mix for dye-based qPCR, and nuclease-free water. The 5x One-step SolisGreen® Mix contains an internal reference based on ROX dye and is compatible with most qPCR instruments, except those that require high ROX level for signal normalization.

Benefits

- cDNA synthesis and dye-based qPCR in one tube
- high **specificity, sensitivity** and **yield**
- consistent results with **low RNA input**
- **RNase inhibitor** included in kit
- reaction set-up and shipment **without ice**

Did you know?

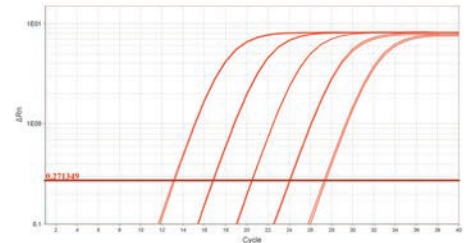
The possibility of room temperature reaction set-up makes Solis BioDyne products perfect for high-throughput applications.

» RiboGrip™ RNase inhibitor is included in the reaction premix

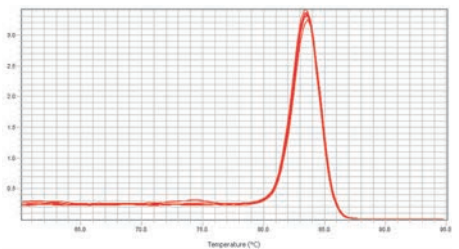
PRECISE QUANTIFICATION

One-step RT-qPCR targeting human PPIA gene fragment (101 bp) was performed using SOLIScript® 1-step SolisGreen® Kit with five 10-fold dilutions (16 ng to 1.6 pg) of Human Reference RNA (total RNA pooled from 10 human cell lines). Reactions were run on Applied BioSystems QuantStudio™ 6 Flex qPCR cyclers using ROX dye for normalization.

Amplification Plot



Melt Curve Plot



Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl
SOLIScript® 1-step SolisGreen® Kit	08-63-0000S (free sample) 08-63-00250	50 250

Products and samples

can be ordered via **e-mail**: orders@solisbiodyne.com, via **skype**: [solis.biodyne](https://www.skype.com/en/contacts/biodyne), via **phone**: +372 740 9960, or via our **e-shop**: [solisbiodyne.com](https://www.solisbiodyne.com)

SOLIScript® 1-step CoV Kit*

Description

A convenient kit for highly specific cDNA synthesis and probe-based qPCR in a single tube. The kit is optimised for detection of SARS-CoV-2 RNA targets and it enables the users to set-up singleplex diagnostic assays using WHO-listed primers and probes (e.g. CDC, US or Berlin, Charité) or develop customized multiplex diagnostic assays with modified oligonucleotides. The kit contains RiboGrip™ RNase inhibitor and is compatible with most cyclers if signal normalisation is not desired. A kit containing ROX passive reference dye is available upon request.

Benefits

- optimized for **SARS-CoV-2** detection
- analyze **1-4 targets** in 1 reaction
- **RNase inhibitor** included in kit
- wide instrument compatibility
- reaction set-up and shipment **without ice**

* Available also as SOLIScript® 1-step RV Kit

Did you know?

SOLIScript® 1-step CoV Kit is already incorporated in several SARS-CoV-2 diagnostic kits and laboratory developed test around the world.

Our partners in diagnostics already trust 1-step CoV Kit

Reference:

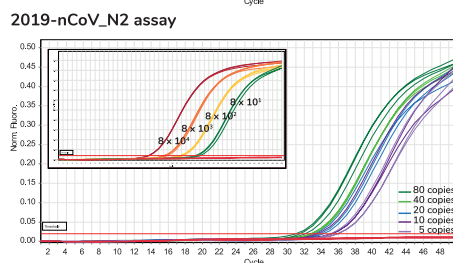
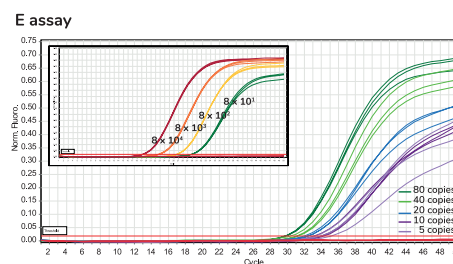
“ Strategic cooperation with the Solis BioDyne team has been one of the most efficient we have experienced during our COVID-19 diagnostic kits products development. Their room temperature stable mastermix is an excellent product which has helped us to reach higher sensitivity and stability of our qPCR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

PETER KILIAN

Chief Operating Officer at MultiplexDX

HIGHLY SENSITIVE DETECTION

RT-qPCR amplification plots of synthetic single stranded RNA using SOLIScript® 1-step CoV Kit with E_Sarbeco (Charité, Germany) and 2019-nCoV_N2 (CDC, US) primers/probe assays. Number of single stranded RNA copies per 8 µl sample in 20 µl reaction is shown. Reactions were performed in triplicates. For each dilution and diagnostic assay, average Ct value and standard deviation (SD) is provided in the table. Reactions were run on Rotor-Gene 6000 qPCR cycler using cycling conditions recommended in the Data Sheet of SOLIScript® 1-step CoV Kit.



ssRNA copies per 8 µL RNA sample per 20 µL reaction	Diagnostic assay	Average Ct value ± SD
80 000	E_Sarbeco	19.35 ± 0.11
8 000	E_Sarbeco	22.79 ± 0.15
800	E_Sarbeco	26.72 ± 0.07
80	E_Sarbeco	29.91 ± 0.07
40	E_Sarbeco	31.03 ± 0.5
20	E_Sarbeco	32.39 ± 0.27
10	E_Sarbeco	33.95 ± 0.55
5	E_Sarbeco	34.22 ± 0.93
80 000	2019-nCoV_N2	20.78 ± 0.06
8 000	2019-nCoV_N2	24.48 ± 0.37
800	2019-nCoV_N2	28.00 ± 0.34
80	2019-nCoV_N2	31.57 ± 0.52
40	2019-nCoV_N2	32.92 ± 0.17
20	2019-nCoV_N2	33.86 ± 0.46
10	2019-nCoV_N2	34.71 ± 0.99
5	2019-nCoV_N2	35.68 ± 0.47

Send your sample request to orders@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl
SOLIScript® 1-step CoV Kit	08-65-0000S (free sample)	50
	08-65-00250	250
	08-65-05000	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

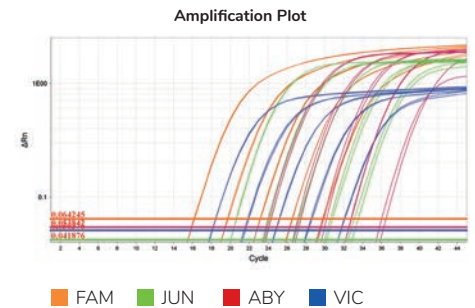
A convenient kit for analysis of RNA targets and performing highly specific cDNA synthesis and probe-based qPCR in a single tube. The kit is optimised for sensitive quantification of up to 4 targets in one reaction using TaqMan® or other hydrolysis probe types with enhanced amplification of GC-rich targets. It contains RiboGrip™ RNase inhibitor 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
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 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**

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. ”

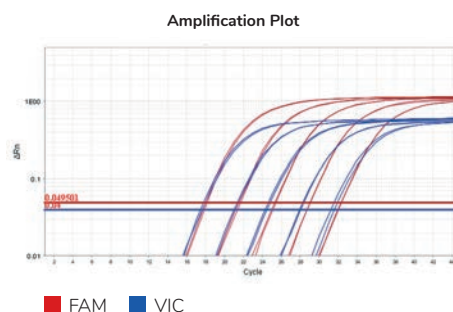
DAVID AGUADO and SÍLVIA BOFILL-MAS

University of Barcelona, Spain

Supplied by Genycell Biotech

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.



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
SOLIScript® 1-step Probe Kit	08-57-0000S (free sample) 08-57-00250	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

TERMIPol® DNA Polymerase

Description

Thermostable DNA polymerase that has an increased efficiency for incorporating unconventional nucleotides such as ddNTPs, acyNTPs or fluorescent nucleotides. TERMIPol® DNA Polymerase is supplied with a reaction buffer and 100 mM MgCl₂.

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**

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

Did you know?

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

Selected publications:

- Bormann, F. et al., Int. J. Cancer. (2018)
- Royo, J.L. et al., Mol. Cell. Probes. (2015)
- Thorkildsen, L.T. et al., Gastroenterol. Res. Pract. (2013)
- Ilina, E.N. et al., Front. Microbiol. (2013)

Send your sample request to orders@solisbiodyne.com

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

Products and samples

can be ordered via **e-mail**: orders@solisbiodyne.com, via **skype**: [solis.biodyne](https://www.skype.com), via **phone**: +372 740 9960, or via our **e-shop**: [solisbiodyne.com](https://www.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.

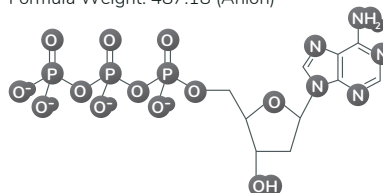
“ In 2005 we started to use the Solis BioDyne dNTP Set in our lab. Comparing the performance of Solis BioDyne dNTPs with two other suppliers in a mutation detection assay, we found similar or even higher FRET signals in our analysed samples. Since then, we use the Solis BioDyne dNTP Set in our lab in 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

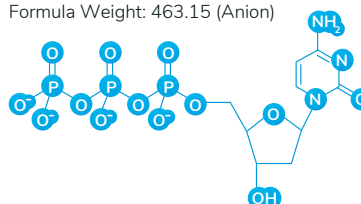
dATP

Formula: $C_{10}H_{12}N_5O_{13}P_3$ (Anion)
Formula Weight: 487.18 (Anion)



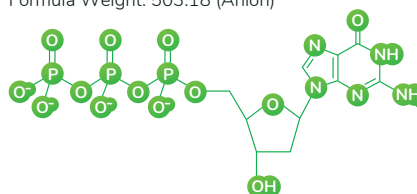
dCTP

Formula: $C_9H_{12}N_4O_{13}P_3$ (Anion)
Formula Weight: 463.15 (Anion)



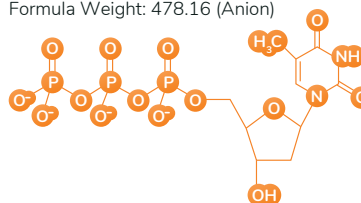
dGTP

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
dNTP Set	02-21-0001S (free sample)	4x1 μ mol / 4x0.01 ml
	02-21-00100	4x25 μ mol / 4x0.25 ml
	02-21-00400	4x100 μ mol / 4x1 ml
dNTP Mix	02-31-0001S (free sample)	0.8 μ mol / 0.01 ml
	02-31-00020	20 μ mol / 0.25 ml
	02-31-00100	100 μ mol / 1.25 ml
dUTP	02-41-0000S (free sample)	2.5 μ mol / 0.025 ml
	02-41-00025	25 μ mol / 0.25 ml

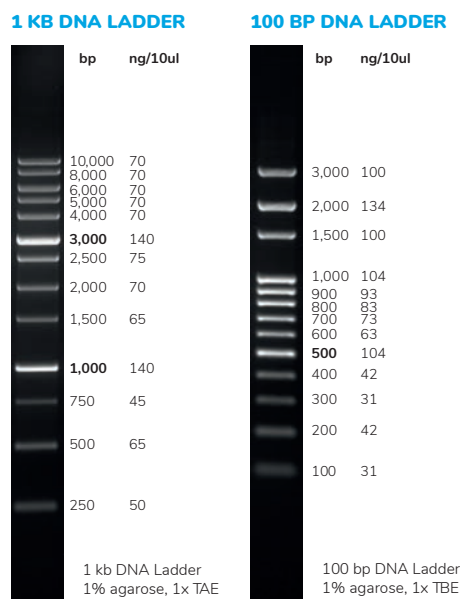
Products and samples

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.



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
100 bp DNA Ladder <i>Ready To Load</i>	07-11-0000S (free sample) 07-11-00050	1.5 µg / 0.015 ml 50 µg / 0.5 ml
1 kb DNA Ladder <i>Ready To Load</i>	07-12-0000S (free sample) 07-12-00050	1.5 µg / 0.015 ml 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 MgCl₂

Description

Magnesium Chloride (MgCl₂) is an important component of PCR reactions. Concentration of MgCl₂ 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 MgCl₂ 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
10x GC-rich Enhancer	05-16-0000S (free sample)	0.1
	05-16-00010	1
	05-16-00050	5
25 mM MgCl ₂	05-11-00025	2.5
	05-11-00050	5
PCR Grade Water	water-025	25
	water-100	100
	water-500	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 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**
- **via fax:** +372 740 2079

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
- PayPal, based on invoice or for orders placed through e-shop
- 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 Skype: [support.sbd](https://www.skype.com/partners/solisbiodyne) or via e-mail: info@solisbiodyne.com

Please see our full ordering conditions on solisbiodyne.com

Product List

Hot-start PCR Mixes		
NEW! 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 04-34-02020	250 rxn/20 µl 5000 rxn/20 µl
HOT FIREPol® MultiPlex Mix Ready To Load with 10 mM MgCl ₂	04-36-00120 04-36-02020	250 rxn/20 µl 5000 rxn/20 µl
HOT FIREPol® Blend Master Mix with 7.5 mM MgCl ₂	04-27-00115 04-27-02015	250 rxn/20 µl 5000 rxn/20 µl
HOT FIREPol® Blend Master Mix with 10 mM MgCl ₂	04-27-00120 04-27-02020	250 rxn/20 µl 5000 rxn/20 µl
HOT FIREPol® Blend Master Mix with 12.5 mM MgCl ₂	04-27-00125 04-27-02025	250 rxn/20 µl 5000 rxn/20 µl
HOT FIREPol® Blend Master Mix Ready To Load with 7.5 mM MgCl ₂	04-25-00115 04-25-02015	250 rxn/20 µl 5000 rxn/20 µl
HOT FIREPol® Blend Master Mix Ready To Load with 10 mM MgCl ₂	04-25-00120 04-25-02020	250 rxn/20 µl 5000 rxn/20 µl
HOT FIREPol® Blend Master Mix Ready To Load with 12.5 mM MgCl ₂	04-25-00125 04-25-02025	250 rxn/20 µl 5000 rxn/20 µl
HOT FIREPol® GC Master Mix	04-33-00115 04-33-02015	250 rxn/20 µl 5000 rxn/20 µl
Standard PCR Mixes		
	CAT. NO.	SIZE
FIREPol® Master Mix with 7.5 mM MgCl ₂	04-11-00115	250 rxn/20 µl
FIREPol® Master Mix with 12.5 mM MgCl ₂	04-11-00125	250 rxn/20 µl
FIREPol® Master Mix Ready To Load with 7.5 mM MgCl ₂	04-12-00115	250 rxn/20 µl
FIREPol® Master Mix Ready To Load with 12.5 mM MgCl ₂	04-12-00125	250 rxn/20 µl
PCR Enzymes		
	CAT. NO.	SIZE
HOT FIREPol® DNA Polymerase (5 U/µl)	01-02-00500 01-02-01000	500 U 1000 U
FIREPol® DNA Polymerase (5 U/µl)	01-01-00500 01-01-01000 01-01-02000	500 U 1000 U 2000 U

Dye-based qPCR Master Mixes		
NEW! 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	250 rxn/20 µl 5x (250 rxn/20 µl) 5000 rxn/20 µl
Standard Cycling	CAT. NO.	SIZE
HOT FIREPol® SolisGreen® qPCR Mix	08-46-00001 08-46-00008 08-46-00020	250 rxn/20 µl 2000 rxn/20 µl 5000 rxn/20 µl
HOT FIREPol® EvaGreen® qPCR Supermix	08-36-00001 08-36-00008 08-36-00020	250 rxn/20 µl 2000 rxn/20 µl 5000 rxn/20 µl
HOT FIREPol® EvaGreen® qPCR Mix Plus (no ROX)	08-25-00001 08-25-00008 08-25-00020	250 rxn/20 µl 2000 rxn/20 µl 5000 rxn/20 µl
HOT FIREPol® EvaGreen® qPCR Mix Plus (ROX)	08-24-00001 08-24-00008 08-24-00020	250 rxn/20 µl 2000 rxn/20 µl 5000 rxn/20 µl
HOT FIREPol® EvaGreen® qPCR Mix Plus (Capillary)	08-26-00001 08-26-00008 08-26-00020	250 rxn/20 µl 2000 rxn/20 µl 5000 rxn/20 µl
HOT FIREPol® EvaGreen® HRM Mix (no ROX)	08-31-00001 08-31-00008 08-31-00020	250 rxn/20 µl 2000 rxn/20 µl 5000 rxn/20 µl
HOT FIREPol® EvaGreen® HRM Mix (ROX)	08-33-00001 08-33-00008 08-33-00020	250 rxn/20 µl 2000 rxn/20 µl 5000 rxn/20 µl

Probe-based qPCR Master Mixes		
NEW! 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
Standard Cycling	CAT. NO.	SIZE
HOT FIREPol® Multiplex qPCR Mix	08-01-00001 08-01-00008 08-01-00020	250 rxn/20 µl 2000 rxn/20 µl 5000 rxn/20 µl
HOT FIREPol® Multiplex qPCR Mix (ROX)	08-02-00001 08-02-00008 08-02-00020	250 rxn/20 µl 2000 rxn/20 µl 5000 rxn/20 µl
HOT FIREPol® Multiplex qPCR Mix (Purple)	08-03-00001 08-03-00008 08-03-00020	250 rxn/20 µl 2000 rxn/20 µl 5000 rxn/20 µl
HOT FIREPol® Probe Universal qPCR Mix	08-17-00001 08-17-00008 08-17-00020	250 rxn/20 µl 2000 rxn/20 µl 5000 rxn/20 µl
HOT FIREPol® Probe qPCR Mix Plus (no ROX)	08-15-00001 08-15-00008 08-15-00020	250 rxn/20 µl 2000 rxn/20 µl 5000 rxn/20 µl
HOT FIREPol® Probe qPCR Mix Plus (ROX)	08-14-00001 08-14-00008 08-14-00020	250 rxn/20 µl 2000 rxn/20 µl 5000 rxn/20 µl

HOT FIREPol® Probe qPCR Mix Plus (Capillary)	08-16-00001 08-16-00008 08-16-00020	250 rxn/20 µl 2000 rxn/20 µl 5000 rxn/20 µl
--	---	---

* SolisFAST® Probe qPCR Mixes with UNG available upon request

** SolisFAST® Probe qPCR Mixes with Purple dye available upon request

One-step RT-qPCR Kits		
Dye-based Kit	CAT. NO.	SIZE
NEW! SOLIScript® 1-step SolisGreen® Kit	08-63-00250	250 rxn/20 µl
Probe-based Kits	CAT. NO.	SIZE
NEW! SOLIScript® 1-step CoV Kit*	08-65-00250	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
SOLIScript® 1-step Probe Kit	08-57-00250	250 rxn/20 µl

* Available also as SOLIScript® 1-step RV Kit

cDNA Synthesis		
	CAT. NO.	SIZE
FIREScript® RT cDNA synthesis MIX with Oligo (dT) and Random primers	06-20-00100 06-20-00500	100 rxn/20 µl 500 rxn/20 µl
FIREScript® RT cDNA synthesis MIX with Oligo (dT) primer	06-18-00100 06-18-00500	100 rxn/20 µl 500 rxn/20 µl
FIREScript® RT cDNA synthesis MIX with Random primers	06-19-00100 06-19-00500	100 rxn/20 µl 500 rxn/20 µl
FIREScript® RT cDNA synthesis MIX without primers*	06-17-00100 06-17-00500	100 rxn/20 µl 500 rxn/20 µl
FIREScript® RT cDNA synthesis KIT*	06-15-00050 06-15-00200	50 rxn/20 µl 200 rxn/20 µl
FIREScript® KIT*	06-13-00050 06-13-00200	50 rxn/20 µl 200 rxn/20 µl

* Similar products with SOLIScript® Reverse Transcriptase available upon request.

Additional Enzymes and Reagents		
	CAT. NO.	SIZE
TERMIPol® DNA Polymerase (5 U/µl)	01-03-0500 01-03-2000	500 U 2000 U
HOT TERMIPol® DNA Polymerase (5 U/µl)	01-06-0500 01-06-2000	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 02-31-00100	20 µmol / 0.25 ml 100 µmol / 1.25 ml
dUTP	02-41-00025	25 µmol / 0.25 ml
100 bp DNA Ladder Ready To Load	07-11-00050	50 µg / 0.5 ml
1 kb DNA Ladder Ready To Load	07-12-00050	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

» FREE SAMPLES are available from the entire product range!

Applied Biosystems and StepOne are trademarks of Applied Biosystems LL C. QuantStudio, ViiA and Mustang Purple are trademarks of Life Technologies Corporation. Stratagene, Mx3000P, Mx3005P and Mx4000 are trademarks of Agilent Technologies inc. Mastercycler is a trademark of Eppendorf AG . Rotor-Gene is a trademark of Qiagen Group. Bio-Rad, CFX96, CFX384, iQ,MyiQ, Opticon 2, Chromo4, MiniOpticon are the trademarks of Bio-Rad Laboratories. LightCycler and TaqMan are trademarks of Roche Molecular Systems Inc. The Eco is a trademark of Illumina Inc. PikoReal is a trademark of Thermo Fisher Scientific Inc. EvaGreen is a trademark of Biotium Inc. SYBR is a registered trademark of Molecular Probes, Inc., FIREPol, HOT FIREPol, FIREScript, SOLIScript and SolisGreen are registered trademarks of Solis BioDyne OÜ, RiboGrip is a trademark of SolisBioDyne OÜ. SolisGreen is based on CYGREEN dye. CYGREEN is used under licence from Enzo Life Sciences, Inc. CYGREEN is a U.S. registered trademark of Enzo Life Sciences, Inc. 3D model of FIREPol DNA Polymerase by Aare Abroi (Tartu University) and Sebastien Langui (Solis BioDyne), picture on the cover by Remo Savisaar.