



Dear Partners,

Solis BioDyne is turning 25. Twenty-five years of valuable experiences, of fruitful collaboration with our clients, and of exciting projects coming to life. We take great pride in the quality and innovation we deliver in our products and solutions. But what we value and appreciate the most is the fact that each year, more scientists put their trust in us. Each of your projects contribute to understand and create a better world, and we are grateful you choose us to be part of them.

Our reagents are used in more than 150 countries all over the globe – from research to diagnostics, from plants to human. This is what we dreamed about 25 years ago and we won't stop here.

Thank you very much for your work and for your trust.

Best regards,

Kadri Artma

Chief Executive Officer

About us

Solis BioDyne manufactures high quality molecular biology reagents since 1995. The company is based in Tartu, Estonia, an international academic city with a growing biotechnology sector.

Our young and professional team is dedicated to provide:

- high quality products
- · cost-effective solutions
- quick and personal service

Our product line includes DNA polymerases, master mixes for PCR/qPCR, reverse transcriptases and other reagents – all stable at room temperature and shipped without ice. This has enabled us to use more sustainable shipping solutions for 25 years already.

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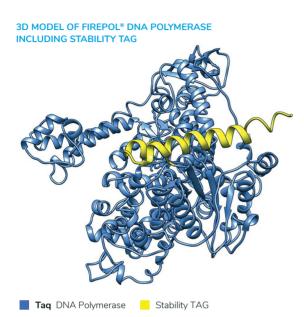
VAT No: EE100587614 **Reg. No:** 10242922

Bank details: Swedbank AS

IBAN code: EE692200221005142234, SWIFT/BIC.: HABAEE2X

Bank address: Liivalaia 8, 15040 Tallinn, Estonia

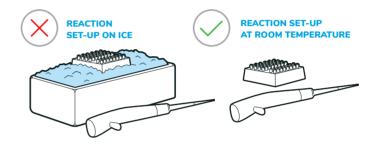
Polypeptide Stabilization Technology: Stability TAG



Ice-free reaction set-up

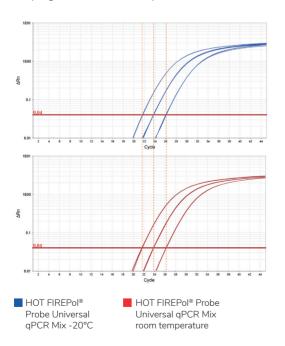
Our temperature stable enzymes allow you to change the way you work with enzymes that are usually extremely sensitive to temperature changes.

- more space on your work station and in your freezer
- convenient working conditions
- less energy used for making ice or keeping bench-top coolers cold



Our technology

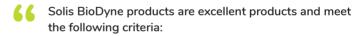
We have genetically modified our enzymes to improve their long term stability and enhance stability at ambient temperatures. The addition of the Stability TAG (EU Patent EP2501716 and US Patent No 9,321,999) ensures that our enzymes are fully active even after keeping them at room temperature for a month!



Our qPCR mix HOT FIREPol® Probe Universal qPCR Mix shows no loss of activity after incubation at room temperature for 1 month!

Worry-free storage

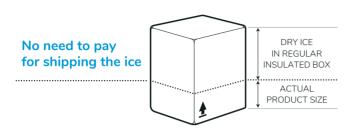
Our reagents remain fully active even after a power outage has damaged everything else in your freezer, after someone has forgotten the reagents on the table overnight, or if there have been delays in the customs during shipment. Routine storage at -20 C is recommended to ensure maximum shelf-life.



- quality: they give good results and a sharp signal without any background noise.
- **cost:** they are inexpensive, the order process is fast and the fact they are storable/shipped at room temperature reduces the cost of transportation.
- convenience: no need to order separately the PCR products as everything is inside the Mix which reduces pipetting errors. It is not necessary to work in ice which helps to save energy and avoid the deterioration of product due to power cuts or forgetting the product at room temperature.

ABDUL AZIZ WANE

Biology and Sanitary Engineer Institut Pasteur Dakar, Senegal



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

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.

Custom Solutions?

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.

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 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





PCR/qPCR Master Mixes: Product Format

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.

EvaGreen® and SolisGreen®

Solis BioDyne dye-based qPCR mixes contain next generation DNA binding dyes EvaGreen® or SolisGreen®. The fluorescence spectra of these dyes are similar to the more widely used SYBR® Green I and are compatible with all major real-time cyclers. Our next generation dyes have:

- high fluorescence level
- high sensitivity for detecting low template concentrations
- high stability for room temperature storage

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

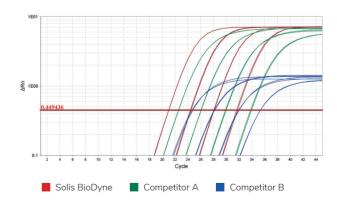


Get 2.5x more reactions done with same volume of PCR/qPCR Mix

Update in Product Format

With our new SolisFAST® range, we have implemented some changes to product names and packaging that will gradually affect our whole product range. We will update the following:

- For small product volumes (up to 1.5 ml) we will be using skirted, stand-alone tubes with screw caps and new labels
- Data sheets will have a new design and format. For each product, you will find step-by-step guidelines and recommendations for conducting a successful experiment.
- The master mix concentration (5x) is removed from the beginning of the product name to avoid confusion in the ordering process.



HIGHLY COMPETITIVE

Four tenfold dilutions of the PPIA gene from human cDNA were amplified using 5x HOT FIREPol® SolisGreen® qPCR Mix (red) and qPCR mixes from Competitor A (green) and Competitor B (blue). The amount of DNA per reaction ranges from 0.1 ng to 0.1 pg. The reactions were performed on an Applied BioSystems $^{\rm TM}$ QuantStudio $^{\rm TM}$ 6 Flex.

Product Selection Guides

Mixes for dye-based qPCR assays

	Speed	Sensitivity	GC-rich performance	dUTP	UNG	Page
NEWI SolisFAST® SolisGreen® qPCR Mix	* * *	* *	*			7
HOT FIREPol® SolisGreen® qPCR Mix	*	* * *	*			13
HOT FIREPol® EvaGreen® qPCR Supermix	*	* *	* * *	•		14
HOT FIREPol® EvaGreen® qPCR Mix Plus	*	*	*			15
HOT FIREPol® EvaGreen® HRM Mix	*	* * *	*			16

For Cycler Compatibility, please check qPCR Mix compatibility tables for dye-based mixes on pages 6 and 12 for SolisFAST® and HOT FIREPol® containing master mixes, respectively.

Mixes for probe-based qPCR assays

	Speed	GC-rich performance	Multiplex qPCR	dUTP	UNG	Page
NEWI SolisFAST® Probe Mix	* * *	*	≤ 5 targets			8-9
NEWI SolisFAST® Probe Mix with UNG	* * *	*	≤ 5 targets	•	•	8-9
HOT FIREPol® Probe Multiplex qPCR Mix	*	* * *	≤ 4 targets	•		18
HOT FIREPol® Probe Universal qPCR Mix	*	* * *	≤ 2 targets	•		19
HOT FIREPol® Probe qPCR Mix Plus	*	*	≤ 2 targets			20

For cycler compatibility, please check qPCR mix compatibility tables for probe-based mixes on pages 6 and 17 for SolisFAST® and HOT FIREPol® containing master mixes, respectively.

Fast qPCR Mix Compatibility Table: Mixes for dye- and probe-based qPCR assays

qPCR Platforms	SolisFAST® SolisGreen® qPCR Mix (ROX)	SolisFAST® SolisGreen® qPCR Mix (no ROX)	SolisFAST® Probe qPCR Mix (ROX)	SolisFAST® Probe qPCR Mix with UNG (ROX)	SolisFAST® Probe qPCR Mix (no ROX)	SolisFAST® Probe qPCR Mix with UNG (no ROX)	SolisFAST® Probe qPCR Mix (Purple)	SolisFAST® Probe qPCR Mix with UNG (Purple)
Applied Biosystems: 7500, 7500 Fast, ViiA [™] 7, QuantStudio [™] 3*, 5, 6 Flex, 7 Flex, 12K Flex	•		•	•			•	•
Agilent/Stratagene: Mx3000P™, Mx3005P™, Mx4000™	•		•	•				
Bio-Rad: CFX96™, CFX384™		•						
Bio-Rad: iQ [™] 5, MyiQ [™] , Chromo4 [™] , Opticon®2; MiniOpticon®		•			•	•		
Bio Molecular Systems: 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		•			•	•		

 $^{^{*}}$ Mixes with Purple reference dye are not compatible with Applied Biosystems QuantStudio $^{\text{TM}}$ 3.

SolisFAST® SolisGreen® **qPCR Mixes**

Description

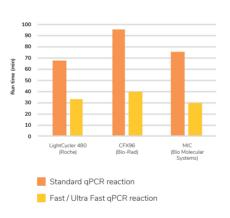
Extremely fast and highly sensitive dye-based qPCR Mix for most demanding applications. Combining novel in silico-designed SolisFAST® DNA Polymerase with fast hot-start, optimized buffer and the SolisGreen® dye, this qPCR Mix offers robust qPCR and accurate target detection. Available in composition with or without passive reference dye (ROX).

Benefits

- qPCR results 2x faster
- highly sensitive SolisGreen® dye
- reaction set-up and shipment without dry ice
- compatible on most cyclers (see page 6)

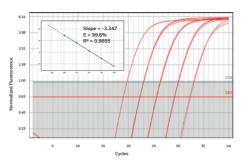
RESULTS IN 30 MINUTES!

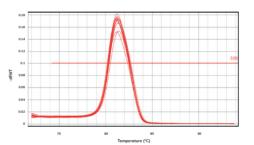
Duration of a qPCR run with standard thermal conditions using regular qPCR mix and fast thermal conditions using SolisFAST® SolisGreen® qPCR Mix.



ACCURATE AND SENSITIVE aPCR

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® gPCR Mix. gPCR 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 in 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			

SolisFAST® Probe qPCR Mixes

Description

Extremely fast and highly sensitive probe-based qPCR Mix that has been optimized for detection and quantification of up to five targets simultaneously. Combining novel in silico-designed SolisFAST® DNA Polymerase with fast hot-start and optimized buffer, this qPCR Mix offers accurate target detection and quantification. This master mix is developed for TaqMan® probes but is also suitable for other hydrolysis probe types. Available in composition with or without passive reference dye (ROX or Purple) and with dUTPs and UNG enzyme.

Benefits

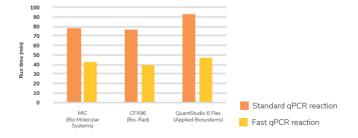
- qPCR results 2x faster
- analyze 1-5 targets in 1 reaction
- reaction set-up and shipment without dry ice
- mixes with dUTP and UNG available to prevent cross-contamination
- compatible on most cyclers (see page 6)
- available with or without ROX or Purple

Did you know?

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

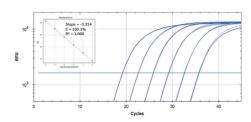
2X LESS TIME FROM SAMPLE TO RESULTS

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.



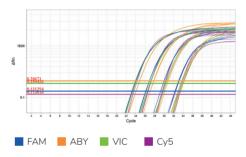
ACCURATE AND SENSITIVE aPCR

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 CFX96TM 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 $^{\text{TM}}$ 6 Flex qPCR cycler (Applied BioSystems $^{\text{TM}}$) 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.



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 Mix with UNG (no ROX)	28-21-0000S (free sample)	50	0.2			
	28-21-00001	250	1			
	28-21-00001-5	5 x 250	5 x 1			
	28-21-00020	5000	20			
SolisFAST® Probe qPCR Mix with UNG (ROX)	28-22-0000S (free sample) 28-22-00001 28-22-00001-5 28-22-00020	50 250 5 x 250 5000	0.2 1 5 × 1 20			
SolisFAST® Probe qPCR Mix with UNG (Purple)	28-23-0000S (free sample) 28-23-00001 28-23-00001-5 28-23-00020	50 250 5 x 250 5000	0.2 1 5 x 1 20			

SolisFAST® PCR Master Mixes

Description

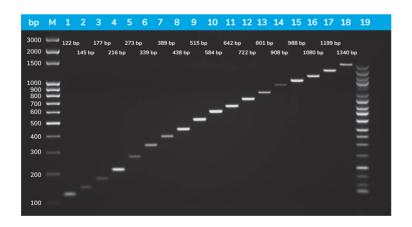
SolisFAST® Master Mix is a 5x-concentrated, ready-to-use solution for fast singleplex and multiplex endpoint PCR assays. The mix allows amplification of up to 5 kb fragments from low complexity DNA templates (e.g. lambda, plasmid DNA), and up to 3 kb from complex DNA templates (e.g. human genomic DNA). Combining our novel *in-silico* designed SolisFAST® DNA Polymerase and optimized buffer, this mix offers robust PCR, accurate target detection, ice-free shipping and reaction set-up. Available also in a ready-to-load composition and with dUTPs and UNG enzyme.

Benefits

- PCR results in 20 minutes
- analyze multiple targets per reaction
- reaction set-up and shipment without dry ice
- suitable for templates up to 5 kb
- mixes with dUTP and UNG available to prevent cross-contamination
- readv-to-load mix available
- reliable results in Sanger sequencing applications

EXCELLENT SINGLEPLEX AND MULTIPLEX PCR RESULTS

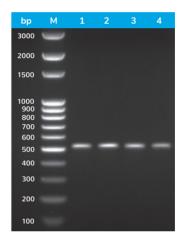
Eighteen fragments of human gDNA (ranging from 122 to 1340 bp) were amplified in singleplex (lane 1-18) and multiplex (lane 19) PCR. Amplifications were performed as a single run on Eppendorf® Mastercycler® X50s using 3-step cycling program optimized for multiplex assays (initial activation 2 min at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



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.

Send your sample request to orders@solisbiodyne.com						
PRODUCT	CAT. NO.	, RXN/20 μl	, SIZE in mI			
SolisFAST® Master Mix	24-01-0000S (free sample) 24-01-00001 24-01-00001-5 24-01-00020	50 250 5 x 250 5000	0.2 1 5 × 1 20			
SolisFAST® Master Mix Ready To Load	24-02-0000S (free sample) 24-02-00001 24-02-00001-5 24-02-00020	50 250 5 x 250 5000	0.2 1 5 x 1 20			
SolisFAST® Master Mix with UNG	24-21-0000S (free sample) 24-21-00001 24-21-00001-5 24-21-00020	50 250 5 x 250 5000	0.2 1 5 x 1 20			
SolisFAST® Master Mix with UNG Ready To Load	24-22-0000S (free sample) 24-22-00001 24-22-00001-5 24-22-00020	50 250 5 x 250 5000	0.2 1 5 x 1 20			

qPCR Mix Compatibility Table: Dye-based qPCR Mixes

qPCR Platforms	HOT FIREPol® SolisGreen® qPCR Mix	HOT FIREPol® EvaGreen® qPCR Supermix	HOT FIREPol® EvaGreen® qPCR Mix Plus (ROX)	HOT FIREPol® EvaGreen® qPCR Mix Plus (no ROX)	HOT FIREPol® EvaGreen® qPCR Mix Plus (Capillary)	HOT FIREPol® EvaGreen® HRM Mix (ROX)	HOT FIREPol® EvaGreen® HRM Mix (no ROX)
Applied Biosystems: 5700, 7000, 7300, 7700, 7900HT, StepOne™, StepOnePlus™		•				•	
Applied Biosystems: 7500, ViiA [™] 7, QuantStudio [™] 3, 5, 6 Flex, 7 Flex, 12K Flex		•	•			•	
Agilent/Stratagene: Mx3000P™, Mx3005P™, Mx4000™		•	•				
Bio-Rad: CFX96™, CFX384™	•	•		•			•
Bio-Rad: iQ [™] 5, MyiQ [™] , Chromo4 [™] , Opticon [®] 2; MiniOpticon [®]		•		•			•
Bio Molecular Systems: 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	•	•		•			•
Roche Applied Science: LightCycler® 1.x, 2.0					•		

HOT FIREPol® SolisGreen® qPCR Mix

Description

Optimized ready-to-use solution for dye-based real-time quantitative PCR assays. SolisGreen® dye is characterized by high sensitivity and great PCR efficiency with low template amounts for accurate and reproducible results.

Benefits

- improved detection of low target concentrations
- higher fluorescence level
- reaction set-up and shipment without dry ice
- compatible with most cyclers (see table on page 12)

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 in your qPCR cycler.

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

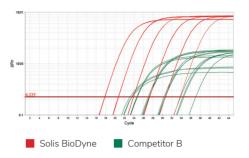
Send your sample request to orders@solisbiodyne.com PRODUCT CAT. NO. RXN/20 µl SIZE in ml 0.2 08-46-0000S (free sample) 50 08-46-00001 250 1 HOT FIREPol® SolisGreen® qPCR Mix 8 08-46-00008 2000 08-46-00020 5000 20

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

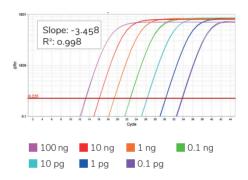
HIGHLY COMPETITIVE

Amplification of six tenfold dilutions of human GAPDH cDNA with 5x HOT FIREPol® SolisGreen® qPCR Mix (red) and a gPCR mix from another vendor (green). Reactions were performed on an Applied BioSystems™ Quant-Studio™ 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.



HOT FIREPol® EvaGreen® qPCR Supermix

Description

Optimized ready-to-use solution for dye-based real-time quantitative PCR assays. This master mix has been developed to give highly specific and sensitive results, and demonstrates excellent performance with GC-rich regions.

Benefits

- high sensitivity with low DNA concentrations
- blue dye to ease pipetting
- reduced primer dimer formation
- reaction set-up and shipment without dry ice
- one qPCR mix for all cyclers (except capillary)
- contains dUTP to prevent cross-contamination with UNG treatment

Researchers already trust Supermix

Reference:

66

I use the 5x HOT FIREPol Evagreen qPCR supermix to determine the expression level of low expressed genes after single cell RT in drop. This qPCR is for me a validation step before sending for sequencing. There are a lot of PCR inhibitors in my sample after RT in drop and my target cDNAs are in a very little amount. They were so happy of the results they obtained with this mix that they ask for the enzyme alone for their PCR. We are now all using this mix for our qPCR.

SOPHIE FOULON

PhD Student

ESCPI, France

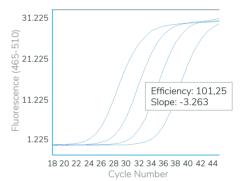
Did you know?

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.

TRUSTWORTHY PERFORMANCE

Amplification plots of tenfold dilution series for the human GAPDH gene performed on Applied Biosystems $^{\text{TM}}$ ViiAT $^{\text{TM}}$ (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.





Selected publications:

- Paula GS., et al. J. Mol. Endocrinol. (2019)
- Vaher H., et al. Allergy Eur. J. Allergy Clin. Immunol. (2019)
- Čamernik K., et al. Stem Cell Res. (2019)
- Bogatikov E., et al. Neurosci. Res. (2019)
- Kivihall A., et al. Clin. Transl. Allergy (2019)
- Es-Haghi M., et al. Cell Commun. Signal. (2019)
- Santiago M., et al. Cell. Mol. Life Sci. (2019)

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) 08-36-00001 08-36-00008 08-36-00020	50 250 2000 5000	0.2 1 8 20			

HOT FIREPol® EvaGreen® qPCR Mix Plus

Description

Cost-effective real time gPCR master mix based on DNA binding dye technology. Provides highly reliable and reproducible results.

Benefits

- high sensitivity and specificity
- excellent efficiency
- reaction set-up and shipment without dry ice
- master mixes for ROX, no ROX and capillary cyclers

Researchers already trust EvaGreen® qPCR Mix Plus

Reference:

We have been using HOT FIREPol® EvaGreen® qPCR Mix Plus (ROX) for almost four years. It works perfectly well as the competition (SYBR Green®) with the advantage of being thermostable. Moreover, the quality of the results coupled with its low price, make it the right choice for our objectives. Overall, Solis BioDyne is a great company with high quality products with immediate delivery.

LUIS FELIX

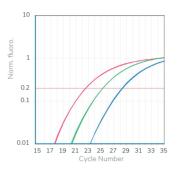
University of Trás-os-Montes and Alto Douro, Portugal

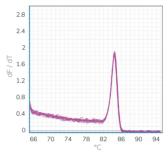
Selected publications:

- Stoker C., et al. Mol. Cell. Endocrinol., 2020.
- Cozzi A., et al. Stem Cell Reports, 2019.
- Machado-Santos A.R., et al. Neuroscience, 2019.
- Sabater-Arcis M., et al. Mol. Ther. Nucleic Acids, 2019.
- Rossetti M.F., et al. Neuroscience, 2019

EXCELLENT SENSITIVITY AND SPECIFICITY

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





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 FIREPol® EvaGreen® qPCR Mix Plus (ROX)	08-24-0000S (free sample) 08-24-00001 08-24-00008 08-24-00020	50 250 2000 5000	0.2 1 8 20			
HOT FIREPol® EvaGreen® qPCR Mix Plus (no ROX)	08-25-0000S (free sample) 08-25-00001 08-25-00008 08-25-00020	50 250 2000 5000	0.2 1 8 20			
HOT FIREPol® EvaGreen® qPCR Mix Plus (Capillary)	08-26-0000S (free sample) 08-26-00001 08-26-00008 08-26-00020	50 250 2000 5000	0.2 1 8 20			

HOT FIREPol® EvaGreen® HRM Mix

Description

Reliable and sensitive real time qPCR master mix for high resolution melt (HRM) analysis.

Benefits

- reaction set-up and shipment without dry ice
- mixes available for ROX and no ROX cyclers
- sensitive EvaGreen® dye allows detection of DNA sequence variations

Did you know?

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

Researchers already trust EvaGreen® HRM Mix

Reference:



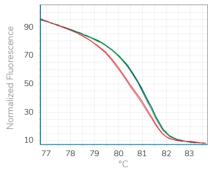
We appreciate your products because most of our research takes place in Kenya and it can be difficult to ship items that are temperature sensitive. The Hot FIREPol® Evagreen® HRM Mix is very effective and the prices are reasonable.

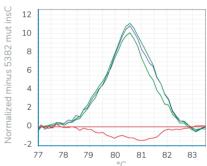
DR JEREMY HERREN

International Centre of Insect Physiology and Ecology, Kenya

SENSITIVE HRM GENOTYPING

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





No.	Color	Name	Genotype	Confi. %
37		Unknown phenotype	5382 wt	99,18
40		Wildtype 1	5382 wt	97,33
41		Wildtype 2	5382 wt	100,00
42		Mutation 1	5382 mut insC	100,00
43		Mutation 2	5382 mut insC	97,47

Selected publications:

- Cavael U., et al. Ecological Indicators (2020)
- Ticha I., et al. Scientific Reports volume (2019)
- Hinsberger A., et al. Viruses (2019)
- Morinha, F., et al. Conservation Genetics Resources (2018).
- Negrisolo, S., et al. European Journal of Human Genetics (2018).

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) 08-33-00001 08-33-00008 08-33-00020	50 250 2000 5000	0.2 1 8 20		
HOT FIREPol® EvaGreen® HRM Mix (no ROX)	08-31-0000S (free sample) 08-31-00001 08-31-00008 08-31-00020	50 250 2000 5000	0.2 1 8 20		

qPCR Mix Compatibility Table: Probe-based qPCR Mixes

qPCR Platforms	HOT FIREPol® Probe qPCR Mix Plus (ROX)	HOT FIREPOI® Probe qPCR Mix Plus (no ROX)	HOT FIREPol® Probe qPCR Mix Plus (Capillary)	HOT FIREPol® Probe Universal qPCR Mix	HOT FIREPol® Multiplex qPCR Mix	HOT FIREPol® Multiplex qPCR Mix (ROX)	HOT FIREPol® Multiplex qPCR Mix (Purple)
Applied Biosystems: 5700, 7000, 7300, 7700, 7900HT, StepOne™, StepOnePlus™	•			•		•	
Applied Biosystems: 7500, ViiA [™] 7, QuantStudio [™] 3*, 5, 6 Flex, 7 Flex, 12K Flex				•		•	•
Agilent/Stratagene: Mx3000P [™] , Mx3005P [™] , Mx4000 ^{PM}				•		•	
Bio-Rad: iQ [™] 5, MyiQ [™] , Chromo4 [™] , Opticon [®] 2; MiniOpticon [®] , CFX96 [™] , CFX384 [™]		•		•	•		
Bio Molecular Systems: 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		•		•	•		
Roche Applied Science: LightCycler® 1.x, 2.0	***************************************						

^{*} HOT FIREPol® Multiplex qPCR Mix (Purple) is not compatible with Applied Biosystems QuantStudio™ 3.

HOT FIREPol® Multiplex qPCR Mix

Description

Probe-based qPCR master mix that has been optimized for highly sensitive and accurate quantification of up to 4 targets in a single reaction. This master mix was developed for TaqMan® probes but is also suitable for other hydrolysis probe types.

Benefits

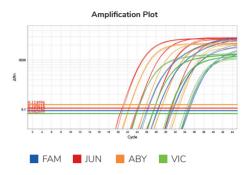
- analyze 1-4 targets in 1 reaction
- high specificity and sensitivity
- reaction set-up and shipment without dry ice
- robust amplification of GC-rich targets
- contains **dUTP** to prevent cross-contamination when used in combination with UNG
- wide instrument compatibility (see table on page 17)

Tip!

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

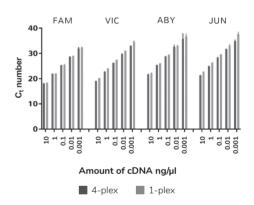
EXCELLENT FOR 4-PLEX ASSAYS

5x HOT FIREPol® Multiplex qPCR Mix (Purple) was used in 4-plex qPCR amplification with 4 tenfold serial dilutions of human gDNA (gDNA concentration in a reaction ranges from 10 ng/µl to 0.01 ng/µl). Reactions were performed with Applied BioSystems™ QuantStudio™ 6 Flex cycler using Purple dye for normalization.



SAME LEVEL OF SENSITIVITY WITH MULTIPLEXING

 $5x\,HOT\,FIREPol^{\otimes}\,Multiplex\,qPCR\,Mix\,(Purple)$ 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 FIREPol® 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 FIREPol® 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 FIREPol® 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 29.

HOT FIREPol® Probe Universal qPCR Mix

Description

Precisely-optimized real time gPCR master mix for probe-based assays. This master mix has been developed for TagMan® probes but is also suitable for other hydrolysis probe types.

Benefits

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

Tip!

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

Researchers already trust Probe Universal

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.

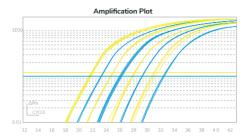
LAÍS MOREIRA GRANATO PHD

Post-Doc

Centro de Citricultura Sylvio Moreira, Brazil Supplied by Sinapse Biotecnologia

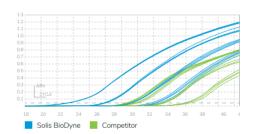
aPCR PERFORMANCE IN A DUPLEX REACTION:

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



HIGHLY COMPETITIVE qPCR MIX:

Four 10x dilutions of 197 bp long fragment of B4G4 gene with GC-content 75.6% were ampified from human gDNA using 5x HOT FIREPol® Probe Universal gPCR Mix (blue) and gPCR Mix from another vendor (green). Reactions were performed on Applied Biosystems $ViiA^{TM}$ 7 Real-Time PCR System following cycling protocol recommended by each supplier.



Selected publications:

- Giglioti R., et al. Exp. Appl. Acarol. (2019)
- Lettlova S., et al. Cell. Physiol. Biochem. (2018)
- Dolci, M., et al. Environmental Pollution (2018).
- Lettlova, S., et al. Cellular Physiology and Biochemistry (2018).
- Schiro, G., et al. Journal of Fungi (2018).
- Okino, C.H., et al. Molecular Biology Reports (2018).

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) 08-17-00001 08-17-00008 08-17-00020	50 250 2000 5000	0.2 1 8 20	

HOT FIREPol® Probe qPCR Mix Plus

Description

Cost-effective real time qPCR master mix for probe-based qPCR assays. This master mix has been developed for TaqMan® probes but is also suitable for other hydrolysis probe types.

Benefits

- suitable for singleplex and duplex assays
- high specificity and sensitivity
- reaction set-up and shipment without dry ice
- master mixes for ROX, no ROX and capillary cyclers

Tip!

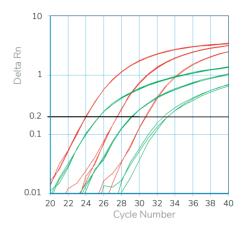
Melting temperature (T_m) of the probe should be 6 – 8 °C higher than the T_m of the primers.

Selected publications:

- Vaher H., et al. Exp. Dermatol. (2019)
- Šuchmanová K. et al. Br. J. Pharmacol. (2019)
- Körner C., et al. PLoS One (2019)
- Viktorová J. et al. Antioxidants (2019)
- Kivihall A., et al. Clin Transl Allergy (2019)
- Körner K., et al. PLOS ONE (2019)

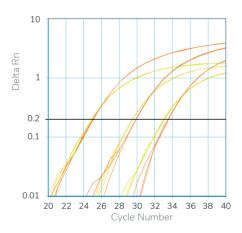
HIGHLY COMPETITIVE

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



qPCR PERFORMANCE IN A DUPLEX REACTION

Amplification of FAM labelled target SNA11 (orange) and VIC labelled reference gene HPRT (yellow) was performed in a single reaction using HOT FIREPol® Probe qPCR Mix Plus. This multiplex qPCR was carried out on three tenfold dilutions of human placental cDNA on Applied Biosystems $7900 \, \text{HT}$ Real-Time PCR System.



Send your sample request to orders@solisbiodyne.com					
PRODUCT	CAT. NO.	RXN/20 µl	SIZE in ml		
HOT FIREPol® Probe qPCR Mix Plus (ROX)	08-14-0000S (free sample) 08-14-00001 08-14-00008 08-14-00020	50 250 2000 5000	0.2 1 8 20		
HOT FIREPol® Probe qPCR Mix Plus (no ROX)	08-15-0000S (free sample) 08-15-00001 08-15-00008 08-15-00020	50 250 2000 5000	0.2 1 8 20		
HOT FIREPol® Probe qPCR Mix Plus (Capillary)	08-16-0000S (free sample) 08-16-00001 08-16-00008 08-16-00020	50 250 2000 5000	0.2 1 8 20		

Product Selection Guide: Endpoint PCR Enzymes and Master Mixes

	Hot Start	Ready to Load	dUTP+ UNG	Fidelity vs. Taq	Ampli- fication Range ^a	Resulting ends	Speed	GC-rich perfor- mance	Multi- plex PCR	Page(s)
FIREPol® DNA Polymerase				1x	5 kb	3'A	*	* *	* *	27
FIREPol® Master Mix				1x	5 kb	3'A	*	*	*	28
FIREPol® Master Mix Ready to Load		•		1x	5 kb	3'A	*	*	*	28
HOT FIREPol® DNA Polymerase	•			1x	5 kb	3'A	*	* *	* *	22
HOT FIREPol® Blend Master Mix	•			5x	5 kb	3'A/ Blunt	*	*	*	25-26
HOT FIREPol® Blend Master Mix Ready to Load	•	•		5x	5 kb	3'A/ Blunt	*	*	*	25-26
HOT FIREPol® GC Master Mix	•			1x	5 kb	3'A	*	* * *	*	23
HOT FIREPol® Multiplex Mix	•			1x	5 kb	3'A	*	*	* * *	24
HOT FIREPol® Multiplex Mix Ready to Load	•	•		1x	5 kb	3'A	*	*	* * *	24
NEW! SolisFAST® Master Mix	•			1x	5 kb	3'A	* * *	*	* * *	10-11
NEW! SolisFAST® Master Mix Ready to Load	•	•		1x	5 kb	3'A	* * *	*	* * *	10-11
NEW! SolisFAST® Master Mix with UNG	•		•	1×	5 kb	3'A	* * *	*	* * *	10-11
NEW! SolisFAST® Master Mix with UNG Ready to Load	•	•	•	1x	5 kb	3'A	* * *	*	* * *	10-11

 $^{^{\}rm a}~$ 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).

HOT FIREPol® DNA Polymerase

Description

Chemically modified hot-start version of the thermostable Taq DNA polymerase FIREPol®. This enzyme is activated only after heat treatment 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.

Benefits

- increased specificity and sensitivity
- reduced **primer dimer** formation
- reaction set-up and shipment without dry 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:

66

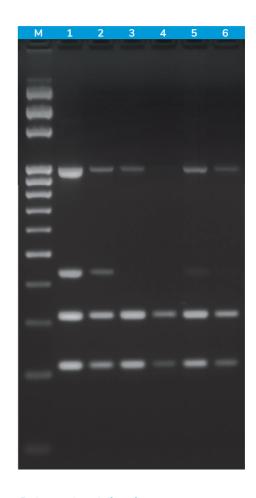
We had some problems with the implementation of a protocol, we tried for a long time with different enzymes without any positive results. We tested the HOT FIREPol® and it was the perfect troubleshooting, besides the great technical support received from Solis BioDyne.

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:

- Gawish R., et al. Cell Reports (2019)
- Tessema S. K., et al. Cell Host Microbe. (2019)
- Atac D. G., et al. Hum. Mol. Genet., (2019)
- Schreurs R. R. C. E., et al. Immunity, (2019)
- Hammer Q., et al. Nature Immunology (2018).
- Burgstaller J.P., et al. Nature Communications (2018).

Send your sample request to orders@solisbiodyne.com				
PRODUCT	CAT. NO.	SIZE in U		
HOT FIREPol® DNA Polymerase (5 U/μΙ)	01-02-0000S (free sample) 01-02-00500 01-02-01000	100 500 1000		

HOT FIREPol® GC **Master Mix**

Description

PCR master mix that has been developed for working with difficult GC-rich templates and DNA secondary structures. The master mix contains hot-start Taq polymerase HOT FIREPol®, MgCl₂, dNTPs and a special buffer for high yield GC-rich amplification.

Benefits

- excellent amplification with templates up to 79% GC content
- suitable for templates up to 5 kb
- reaction set-up and shipment without dry ice
- vials of 100% DMSO and 25 mM MgCl₂ enable flexibility in reaction optimization

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 lowabundance, 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

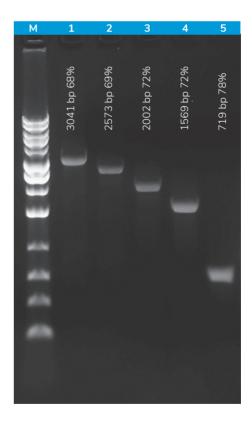
AMPLICONS OF VARIOUS GC-CONTENT

12 GC-rich genes were amplified from human gDNA using HOT FIREPol® 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 FIREPol® 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.



Send your sample request to orders@solisbiodyne.com				
PRODUCT	CAT. NO.	RXN/20 μl	SIZE in ml	
HOT FIREPol® GC Master Mix	04-33-00\$15 (free sample) 04-33-00115 04-33-02015	25 250 5000	0.1 1 20	

HOT FIREPol® MultiPlex Mix & MultiPlex Mix Ready to Load

Description

Precisely-optimized PCR master mix for multiplex PCR assays. This master mix contains thermostable hot-start Taq polymerase HOT FIREPol®, MgCl₂, dNTPs and buffer. You just need to add template, primers and water.

Benefits

- analyze multiple targets per reaction
- increased sensitivity and yield
- prevents **primer dimer** formation
- reaction set-up and shipment without dry ice

Researchers already trust MultiPlex Mix

Reference:

66

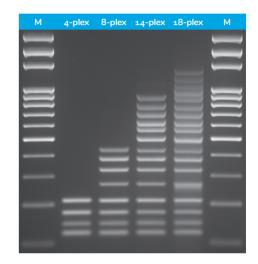
Convinced with the performance and quality of the product in multiple applications: robust enzyme activity and reproducible results in single and highly multiplexed PCRs. A "must-have" in the laboratory.

DR. SERGEY YAKUSHEV

Head of the laboratory Microsynth, Switzerland

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		

HOT FIREPol® Blend Master Mix & **Blend Master Mix** Ready to Load

Description

Precisely-optimized PCR master mix for more demanding PCR assays. In addition to the hot-start Tag polymerase HOT FIREPol® this master mix contains a proofreading enzyme which offers enhanced performance.

Benefits

- increased yield, sensitivity and specificity
- up to 5x higher fidelity
- suitable for templates up to 5 kb
- reduced primer dimer formation
- reaction set-up and shipment without dry ice

Did you know?

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

Researchers already trust **Blend Master Mix**

Reference:

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

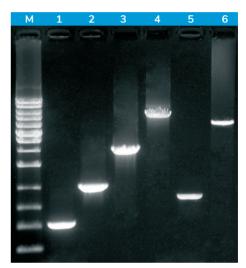
EMMY CHEPKOECH

PhD student

University of Eldoret, Kenya

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 FIREPol® Blend Master Mix Ready to Load with 7.5 mM MgCl_a.



Lane	Template	Amplicon Length
1	λDNA	499 bp
2	λDNA	1003 bp
3	λDNA	1998 bp
4	λDNA	4991 bp
5	Mouse genomic DN	A 808 bp
6	Mouse genomic DN	A 3838 bp

Selected publications:

- Pellerin J.L., et al., Theriogenology (2019)
- Ogola E. O., et al. Parasites and Vectors (2019)
- Bahram, M., et al. Nature (2018).
- Otsing, E., et al. Soil Biology and Biochemistry (2018).
- Mullett, M.S., et al. Forest Pathology (2018).
- Strobel, A., et al. Environmental Toxicology and Chemistry (2018).
- Lange, M.K., et al. Veterinary Parasitology (2018).

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		
HOT FIREPol® Blend Master Mix with 15 mM MgCl ₂	04-27-00S30 (free sample)	25	0.1		
	04-27-00130	250	1		
	04-27-02030	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) 04-25-00115 04-25-02015	25 250 5000	0.1 1 20		
HOT FIREPol® Blend Master Mix Ready to Load with 10 mM MgCl ₂	04-25-00S20 (free sample) 04-25-00120 04-25-02020	25 250 5000	0.1 1 20		
HOT FIREPol® Blend Master Mix Ready to Load with 12.5 mM MgCl ₂	04-25-00S25 (free sample) 04-25-00125 04-25-02025	25 250 5000	0.1 1 20		
HOT FIREPol® Blend Master Mix Ready to Load with 15 mM MgCl ₂ 04-25-00S30 (free samp 04-25-0130 04-25-02030		25 250 5000	0.1 1 20		

FIREPol® DNA Polymerase

Description

Genetically modified thermostable Tag 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.

Benefits

- robust amplification for routine applications
- suitable for templates up to 5 kb
- reaction set-up and shipment without dry ice

Researchers already trust FIREPol®

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

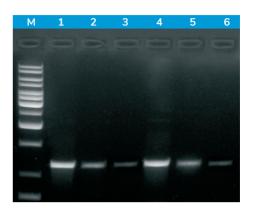
School of Biochemistry and Cell Biology University College Cork, Ireland

Selected publications:

- Houhou H., et al. Scientific Reports (2019)
- Müller P., et al. RNA Biol. (2019)
- García-Martín A.B. et al. Antimicrob. Agents Chemother. (2019)
- Herzog C. et al. Agric. Ecosyst. Environ. (2019)
- Ibrahim J. N., et al. J. Infect. Dev. Ctries. (2019)
- Garcia-Martin, A.B., et al. Veterinary Microbiology (2018).

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/µI.



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/ul.



Tip!

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

Send your sample request to orders@solisbiodyne.com			
PRODUCT	CAT. NO.	SIZE in U	
FIREPol® DNA Polymerase (5 U/µI)	01-01-0000S (free sample) 01-01-00500 01-01-01000 01-01-02000	100 500 1000 2000	

FIREPol® Master Mix & Master Mix Ready to Load

Description

Optimized ready-to-use PCR master mix for routine PCR assays. This master mix contains thermostable Taq polymerase FIREPol®, MgCl₂, dNTPs and buffer with detergent. You just need to add template, primers and water.

Benefits

- ready to load version allows you to load the PCR product on your gel straight after cycling
- suitable for templates up to 5 kb
- reaction set-up and shipment without dry ice
- all-in-one master mix format reduces pipetting errors and saves time

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.

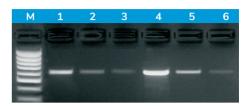
CLAUDINE CORNELOUP

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:

- Li N., et al. Journal of Endocrinology (2019)
- Agasild H., et al., Harmful Algae (2019)
- Furlanis E. et al. Nat. Neurosci. (2019)
- Tamm, M., et al. Ecological Indicators (2019).
- Mashaly A., et al. Tropical Biomedicine (2019)
- Laurimäe T., et al. Parasitology Research (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	<mark>25</mark> 250	0.1		
FIREPol® Master Mix with 12.5 mM MgCl ₂	04-11-00S25 (free sample) 04-11-00125	25 250	0.1		
FIREPol® Master Mix Ready to Load with 7.5 mM MgCl ₂	04-12-00S15 (free sample) 04-12-00115	25 250	0.1		
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		

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

		Nr of targets per reaction	GC-rich templates	dUTP	Passive reference dye	Compatible cyclers	Incompatible probe reporter dyes	Page
etection	SOLIScript® 1-step Probe Kit	1-2	*		ROX	All cyclers	ROX JUN Texas Red	31
	SOLIScript® 1-step Multiplex Probe Kit	1-4	***	•	None	All cyclers except Applied BioSystems™ and Agilent		32
Probe-based detection	SOLIScript® 1-step Multiplex Probe Kit (ROX)	1-4	***	•	ROX	Applied BioSystems™ and Agilent cyclers	ROX JUN Texas Red	32
	SOLIScript® 1-step Multiplex Probe Kit (Purple)	1-4	***	•	Purple	Applied BioSystems™ cyclers with Mustang Purple® channel	Cy5	32
Dye- based detection	NEW! SOLIScript® 1-step Solis- Green® Kitª	1	*		ROX	no ROX and low-ROX cyclers		30
Endpoint detection	One-step RT-PCR kit for endpoint detection ^a					_	-	_

 $^{^{\}rm a}~$ These kits are currently in development and will be available soon.

SOLIScript® 1-step SolisGreen® Kit

Description

Convenient format for performing cDNA synthesis and dye-based qPCR in a single tube. The kit contains qPCR mix, SOLIScript® RT enzyme mix with RiboGrip $^{\text{TM}}$ RNase inhibitor, and nuclease-free water.

Benefits

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

Did you know?

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

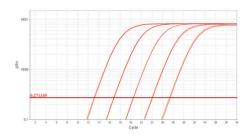


RiboGrip™ RNase inhibitor is included in the reaction premix

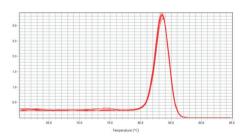
PRECISE QUANTIFICATION

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 $^{\text{TM}}$ 6 Flex qPCR cycler using ROX dye for normalization.

Amplification Plot



Melt Curve Plot



Send your sample request to orders@solisbiodyne.com		Available from April 2020		
PRODUCT	CAT. NO.	RXN/20 μΙ		
SOLIScript® 1-step SolisGreen® Kit	08-63-0000S (free sample) 08-63-00250	50 250		

SOLIScript® 1-step Probe Kit

Description

Convenient kit format for performing highly specific cDNA synthesis and probe-based qPCR in a single tube. The kit contains qPCR mix, SOLIScript® RT enzyme mix with RiboGrip™ RNase inhibitor, and nuclease-free water.

Benefits

- cDNA synthesis up to 60°C for superior specificity
- suitable for singleplex and duplex assays
- reaction set-up and shipment without dry ice
- high specificity and sensitivity
- one kit for all cyclers
- RNase inhibitor included in kit

Tip!

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

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.

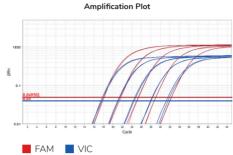
DAVID AGUADO and SÍLVIA BOFILL-MAS

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



SOLIScript® 1-step Multiplex Probe Kit

Description

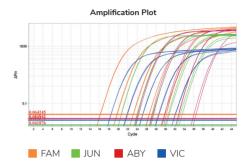
Convenient kit format for performing highly specific cDNA synthesis and probe based qPCR in a single tube. This kit was developed for sensitive and accurate RNA quantification with up to 4 targets in the same reaction. Multiplex compatibility and increased stability at room temperature make it ideal for high throughput RNA analysis. The kit contains qPCR mix optimized for multiplex reactions, SOLIScript® RT enzyme mix with RiboGripTM RNase inhibitor, and nuclease-free water.

Benefits

- cDNA synthesis up to 60°C for superior specificity
- analyze 1-4 targets in 1 reaction
- reaction set-up and shipment without dry ice
- 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 (see table on page 29)

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/ μ l to 0.4 pg/ μ l per reaction). Reactions were performed with Applied BioSystemsTM QuantStudioTM 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			

Product Selection Guide: First Strand cDNA synthesis

	Specification	Product format	Reaction temperature	RNase H activity	Page(s)
FIREScript® RT cDNA Synthesis Mix		 3-vial-kit format 4 priming options^a 	37°C-60°C	Full	34-35
FIREScript® RT cDNA Synthesis Kit	Excellent enzyme for standard applications	 7-vial-kit format 4 priming options^a 	37°C-60°C	Full	34-35
FIREScript® Kit		enzyme and reaction buffer only	37°C-60°C	Full	34-35
SOLIScript [®] RT cDNA Synthesis Mix	Superior	 3-vial-kit format gene-specific primers only^b 	37°C-60°C	Reduced	36
SOLIScript® RT cDNA Synthesis Kit	specificity with complex templates and specific primers	6-vial-kit format2 priming options^c	37°C-60°C	Reduced	36
SOLIScript® Kit		enzyme and reaction buffer only	37°C-60°C	Reduced	36

^a Primers provided with the product: oligo (dT), random, oligo (dT) and random combined. Genespecific primers to be supplied by the user.

b Gene-specific primers to be supplied by the user.

^c Primer provided with the product: oligo (dT). SOLIScript® RT is not suitable with random primers. Gene-specific primers to be supplied by the user.

FIREScript® Reverse Transcriptase

Description

Genetically modified MMLV-based reverse transcriptase with increased thermostability for better performance. FIREScript® RT is extremely stable and will remain fully active for up to one month at room temperature. This RT contains a functional RNase H domain which can increase the sensitivity of RT-qPCR.

Benefits

- high specificity and yield
- wide reaction temperature 37°C 60°C
- fast 15 min reaction time
- reaction set-up and shipment without dry ice
- available in convenient mix format and flexible kit format

Did you know?

A higher reaction temperature during reverse transcription denatures 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.

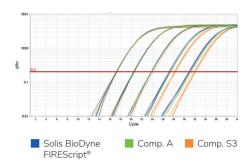
VALERIE

Research technician

University of Basel, Switzerland Supplied by LucernaChem AG

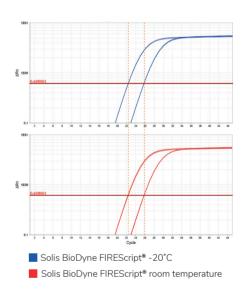
HIGHLY COMPETITIVE ENZYME

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:

- Fallah H., et al. Sci. Rep. (2019)
- Jasaszwili M., et al. Mol. Cell. Endocrinol. (2019)
- Dobránszki j., et al. Plant Mol. Biol. (2019)
- Wojciechowicz, T., et al. Int J Food Sci Tech (2018).
- Popēna, I., et al. Cell Communication and Signaling (2018).
- Aufschnaiter, A. et al. Frontiers in Molecular Neuroscience (2018).

Send your sample request to orders@solis	biodyne.com	
PRODUCT	CAT. NO.	RXN/20 μl
FIREScript® RT cDNA synthesis MIX*	06-16-0000S (free sample)	20
FIREScript® RT cDNA synthesis MIX with Oligo (dT) and Random primers	06-20-00100 06-20-00500	100 500
FIREScript® RT cDNA synthesis MIX with Oligo (dT) primer	06-18-00100 06-18-00500	100 500
FIREScript® RT cDNA synthesis MIX with Random primers	06-19-00100 06-19-00500	100 500
FIREScript® RT cDNA synthesis MIX without primers	06-17-00100 06-17-00500	100 500
FIREScript® RT cDNA synthesis KIT	06-15-0000S (free sample) 06-15-00050 06-15-00200	20 50 200
FIREScript® KIT	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.

SOLIScript® Reverse Transcriptase

Description

Novel in silico-engineered, thermostable reverse transcriptase with reduced RNase H activity. SOLIScript® RT is extremely stable and will remain fully active for up to one month at room temperature.

Benefits

- superior specificity with gene-specific primers
- wide reaction temperature 37 60°C
- reaction set-up and shipment without dry ice
- available in convenient mix format and flexible kit format

Did you know?

Always use experimental data to optimize the reaction temperature for your gene-specific primers in cDNA synthesis to find the best balance between specificity and yield.

Researchers already trust SOLIScript®

Reference:

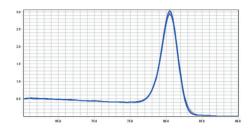
SOLIScript is definitely the best RT enzyme in its price category. It is a consistent and processive enzyme. In our experiments, we work with heavily modified RNA species, and yet SOLIScript showed excellent results.

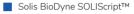
KIRILL JEFIMOV

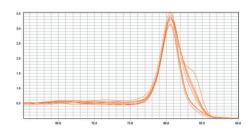
University of Bergen, Norway

SUPERIOR SPECIFICITY

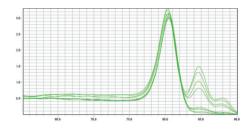
cDNA synthesis reactions were performed using a ß2M gene-specific primer at 55°C following protocols recommended by the suppliers. Downstream qPCR reactions were performed with HOT FIREPol qPCR Supermix on an Applied BioSystems™ QuantStudio™ 6 Flex Reactions in which cDNA was synthesized using SOLIScript® RT (blue) have a highly specific qPCR melt curve compared to Competitor S3 (orange) and Competitor R (green).







Competitor S3



Competitor R

Send your sample request to orders@solisbiodyne.com			
PRODUCT	CAT. NO.	RXN/20 μl	
SOLIScript® RT cDNA synthesis MIX	06-37-0000S (free sample) 06-37-00100 06-37-00500	20 100 500	
SOLIScript® RT cDNA synthesis KIT	06-35-0000S (free sample) 06-35-00050 06-35-00200	50 50 200	
SOLIScript® KIT	06-33-0000S (free sample) 06-33-00050 06-33-00200	50 50 200	

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
- robust and reliable
- reaction set-up and shipment without dry 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. International Journal of Cancer (2018).
- Royo, J.L., et al. Molecular and Cellular Probes (2015).
- Gorokhova, S.G., et al. J. Clin Exp Cardiolog (2014).
- Thorkildsen, L.T., et al. Gastroenterology Research and Practice (2013).
- Ilina, E.N., et al. Front Microbiol (2013).
- Tierling, S., et al. International Journal of Cancer (2012).

Send your sample request to orders@solisbiodyne.com			
PRODUCT	CAT. NO.	SIZE in U	
TERMIPol® DNA Polymerase (5 U/µI)	01-03-0000S (free sample) 01-03-00500 01-03-02000	500 500 2000	
HOT TERMIPol® DNA Polymerase (5 U/µI)	01-06-0000S (free sample) 01-06-00500 01-06-02000	500 500 2000	

Products and samples

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.

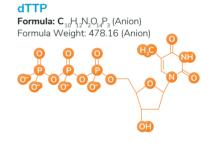
JUERGEN SIEVERTSEN

Bernhard Nocht Institute for Tropical Medicine (BNITM), Germany

dATP Formula: C₁₀H₁₂N₅O₁₂P₃ (Anion) Formula Weight: 487.18 (Anion)

dCTP Formula: C₃H₁₂N₃O₁₃P₃ (Anion) Formula Weight: 463.15 (Anion)

dGTP Formula: C₁₀H₁N₅O₁₃P₃ (Anion) Formula Weight: 503.18 (Anion)



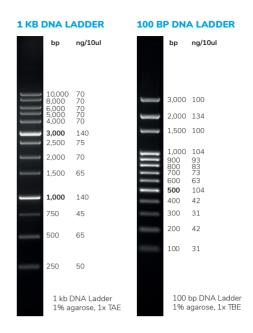
Send your sample request to orders@solisbiodyne.com		
PRODUCT	CAT. NO.	SIZE
dNTP Set	02-21-0001S (free sample) 02-21-00100 02-21-00400	4x1 μmol / 4x0.01 ml 4x25 μmol / 4x0.25 ml 4x100 μmol / 4x1 ml
dNTP Mix	02-31-0001S (free sample) 02-31-00020 02-31-00100	0.8 μmol / 0.01 ml 20 μmol / 0.25 ml 100 μmol / 1.25 ml
dUTP	02-41-0000S (free sample) 02-41-00025	2.5 μmol / 0.025 ml 25 μmol / 0.25 ml

Products and samples

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 Buffer Blue and Dye Buffer 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

- Double Blue
- Orange and Blue Orange

Send your sample request to o	rders@solisbiodyne.com	
PRODUCT	CAT. NO.	SIZE
100 bp DNA Ladder Ready to Load	07-11-0000S (free sample) 07-11-00050	1.5 μg / 0.015 ml 50 μg / 0.5 ml
1 kb DNA Ladder Ready to Load	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) 05-16-00010 05-16-00050 05-16-00200	0.1 1 5 20
25 mM MgCl ₂	05-11-00025 05-11-00050 05-11-00200	2.5 5 20
PCR Grade Water	water-025 water-100 water-500	25 100 500

Products and samples

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, regular storage at -20°C is recommended.



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 Cost

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

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 or via e-mail: info@solisbiodyne.com

Customized solutions

This product catalogue contains standard products, tube sizes and kits. Please contact us for customized solutions.

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 reception. In most cases orders are shipped within 1 or 2 business days.

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:

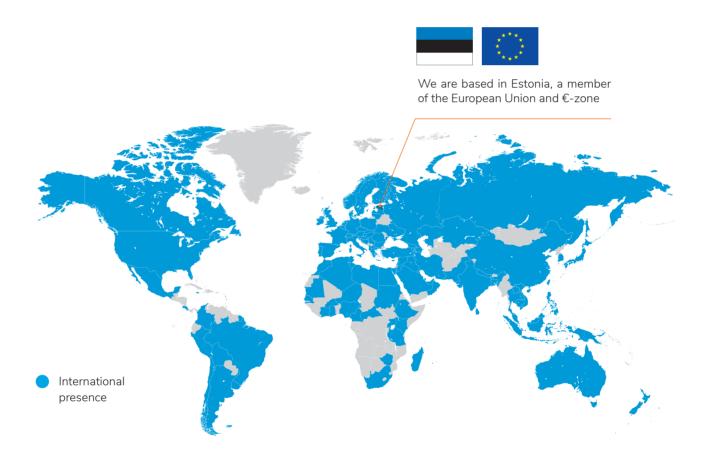
- wire transfer, based on invoice
- PayPal, based on invoice or for orders placed through e-shop
- credit card (VISA or Master Card) for orders placed through our e-shop

Checks are not accepted as a payment method.

Please see our full ordering conditions on solisbiodyne.com

International Presence

Solis BioDyne currently has clients in more than 110 countries. We make our reagents accessible globally either by supplying them directly or in some areas by relying on local distributors who share our high standards in service and technical support. Please see the distributors section on next page or contact us directly to find the most convenient way to order in your region.



Distributors

AFRICA

Gene Life Sciences

Algeria

T: +213550537381 E: contact@genelifesciences.com www.genelifesciences.com

Univers Biomedical Sarl Burkina Faso

T: +226 50 48 36 16/17 E: bagre@unibio.bf www.unibio.bf

Biotechegypt Co.

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T: +202 33 853 565 E: moustafa@biotechegypt.net www.biotechegypt.net

Truspec Biotechnology

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ASIA

AmyJet Scientific Inc

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T: +86 400-6800-868 E: info@amyjet.com http://www.amvjet.com

Biogenuix Medsystems Pvt. Ltd.

T: +91 11 2561 2008 E: contact@biogenuix.com www.biogenuix.com

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T: +91 1145035753 **E:** customerservice@biolinkk.com www.biolinkk.com

PT. Medguest Java Global

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Product List

FAST qPCR Mixes, Dye-based		
	CAT. NO.	SIZE
SolisFAST® SolisGreen® qPCR Mix (no ROX)	28-41-0000S 28-41-00001 28-41-00001-5 28-41-00020	50 rxn /20 µl 250 rxn /20 µl 5x (250 rxn /20 µl) 5000 rxn /20 µll
SolisFAST® SolisGreen® qPCR Mix (ROX)	28-46-0000S 28-46-00001 28-46-00001-5 28-46-00020	50 rxn /20 µl 250 rxn /20 µl 5x (250 rxn /20 µl) 5000 rxn /20 µl

FAST qPCR Mixes, Probe-based		
	CAT. NO.	SIZE
SolisFAST® Probe qPCR Mix (no ROX)	28-01-0000S 28-01-00001 28-01-00001-5 28-01-00020	50 rxn /20 µl 250 rxn /20 µl 5x (250 rxn /20 µl) 5000 rxn /20 µll
SolisFAST® Probe qPCR Mix (ROX)	28-02-0000S 28-02-00001 28-02-00001-5 28-02-00020	50 rxn /20 µl 250 rxn /20 µl 5x (250 rxn /20 µl) 5000 rxn /20 µl
SolisFAST® Probe qPCR Mix (Purple)	28-03-0000S 28-03-00001 28-03-00001-5 28-03-00020	50 rxn /20 µl 250 rxn /20 µl 5x (250 rxn /20 µl) 5000 rxn /20 µ
SolisFAST® Probe qPCR Mix with UNG (no ROX)	28-21-0000S 28-21-00001 28-21-00001-5 28-21-00020	50 rxn /20 µl 250 rxn /20 µl 5x (250 rxn /20 µl) 5000 rxn /20 µ
SolisFAST [®] Probe qPCR Mix with UNG (ROX)	28-22-0000S 28-22-00001 28-22-00001-5 28-22-00020	50 rxn /20 µl 250 rxn /20 µl 5x (250 rxn /20 µl) 5000 rxn /20 µ
SolisFAST® Probe qPCR Mix with UNG (Purple)	28-23-0000S 28-23-00001 28-23-00001-5 28-23-00020	50 rxn /20 µl 250 rxn /20 µl 5x (250 rxn /20 µl) 5000 rxn /20 µ

FAST Standard PCR Mixes		
	CAT. NO.	SIZE
SolisFAST® Master Mix	24-01-0000S 24-01-00001 24-01-00001-5 24-01-00020	50 rxn /20 µl 250 rxn /20 µl 5x (250 rxn /20 µl) 5000 rxn /20 µl
SolisFAST® Master Mix Ready To Load	24-02-0000S 24-02-00001 24-02-00001-5 24-02-00020	50 гхп /20 µl 250 гхп /20 µl 5х (250 гхп /20 µl) 5000 гхп /20 µl
SolisFAST® Master Mix with UNG	24-21-0000S 24-21-00001 24-21-00001-5 24-21-00020	50 rxn /20 µl 250 rxn /20 µl 5x (250 rxn /20 µl) 5000 rxn /20 µl
SolisFAST® Master Mix with UNG Ready To Load	24-22-0000S 24-22-00001 24-22-00001-5 24-22-00020	50 rxn /20 µl 250 rxn /20 µl 5x (250 rxn /20 µl) 5000 rxn /20 µl

Standard qPCR Mixes		
	CAT. NO.	SIZE
HOT FIREPol® SolisGreen® qPCR Mix	08-46-0000S 08-46-00001 08-46-00008 08-46-00020	50 rxn/20 µl 250 rxn/20 µl 2000 rxn/20 µl 5000 rxn/20 µl
HOT FIREPol® EvaGreen® qPCR Supermix	08-36-0000S 08-36-00001 08-36-00008 08-36-00020	50 rxn/20 און 250 rxn/20 און 2000 rxn/20 און 5000 rxn/20 און
HOT FIREPol® EvaGreen® qPCR Mix Plus (ROX)	08-24-0000S 08-24-00001 08-24-00008 08-24-00020	50 rxn/20 µl 250 rxn/20 µl 2000 rxn/20 µl 5000 rxn/20 µl
HOT FIREPol® EvaGreen® qPCR Mix Plus (no ROX)	08-25-0000S 08-25-00001 08-25-00008 08-25-00020	ום 50 rxn/20 ום 250 rxn/20 ום 2000 rxn/20 اام 5000 rxn/20
HOT FIREPol® EvaGreen® qPCR Mix Plus (Capillary)	08-26-0000S 08-26-00001 08-26-00008 08-26-00020	50 rxn/20 μ 250 rxn/20 μ 2000 rxn/20 μ 5000 rxn/20 μ
HOT FIREPol® EvaGreen® HRM Mix (ROX)	08-33-0000S 08-33-00001 08-33-00008 08-33-00020	50 rxn/20 μ 250 rxn/20 μ 2000 rxn/20 μ 5000 rxn/20 μ
HOT FIREPol® EvaGreen® HRM Mix (no ROX)	08-31-0000S 08-31-00001 08-31-00008 08-31-00020	50 rxn/20 μ 250 rxn/20 μ 2000 rxn/20 μ 5000 rxn/20 μ
HOT FIREPol® Multiplex qPCR Mix	08-01-0000S 08-01-00001 08-01-00008 08-01-00020	50 rxn/20 μ 250 rxn/20 μ 2000 rxn/20 μ 5000 rxn/20 μ
HOT FIREPol® Multiplex qPCR Mix (ROX)	08-02-0000S 08-02-00001 08-02-00008 08-02-00020	50 rxn/20 μ 250 rxn/20 μ 2000 rxn/20 μ 5000 rxn/20 μ
HOT FIREPol® Multiplex qPCR Mix (Purple)	08-03-0000S 08-03-00001 08-03-00008 08-03-00020	50 rxn/20 μ 250 rxn/20 μ 2000 rxn/20 μ 5000 rxn/20 μ
HOT FIREPol® Probe Universal qPCR Mix	08-17-0000S 08-17-00001 08-17-00008 08-17-00020	50 rxn/20 μ 250 rxn/20 μ 2000 rxn/20 μ 5000 rxn/20 μ
HOT FIREPol® Probe qPCR Mix Plus (ROX)	08-14-0000S 08-14-00001 08-14-00008 08-14-00020	50 rxn/20 μ 250 rxn/20 μ 2000 rxn/20 μ 5000 rxn/20 μ
HOT FIREPol® Probe qPCR Mix Plus (no ROX)	08-15-0000S 08-15-00001 08-15-00008 08-15-00020	50 rxn/20 μ 250 rxn/20 μ 2000 rxn/20 μ 5000 rxn/20 μ
HOT FIREPol® Probe qPCR Mix Plus (Capillary)	08-16-0000S 08-16-00001 08-16-00008 08-16-00020	50 rxn/20 μ 250 rxn/20 μ 2000 rxn/20 μ 5000 rxn/20 μ

Regular PCR Enzyme and Mixes		
	CAT. NO.	SIZE
FIREPol® DNA Polymerase (5 U/μΙ)	01-01-0000S 01-01-00500 01-01-01000 01-01-02000	100 U 500 U 1000 U 2000 U
FIREPol® Master Mix with 7,5 mM MgCl ₂	04-11-00S15 04-11-00115	25 rxn/20 μl 250 rxn/20 μl
FIREPol® Master Mix with 12.5 mM MgCl ₂	04-11-00S25 04-11-00125	25 rxn/20 μl 250 rxn/20 μl
FIREPol® Master Mix Ready to Load with 7,5 mM MgCl ₂	04-12-00S15 04-12-00115	25 rxn/20 μl 250 rxn/20 μl
FIREPol® Master Mix Ready to Load with 12,5 mM MgCl ₂	04-12-00S25 04-12-00125	25 rxn/20 μl 250 rxn/20 μl

Hot-start PCR Enzyme and Mixes		
	CAT. NO.	SIZE
HOT FIREPol® DNA Polymerase (5U/μΙ)	01-02-0000S 01-02-00500 01-02-01000	100 U 500 U 1000 U
HOT FIREPol® GC Master Mix	04-33-00S15 04-33-00115 04-33-02015	25 rxn/20 µl 250 rxn/20 µl 5000 rxn/20 µl
HOT FIREPol® MultiPlex Mix with 10 mM MgCl ₂	04-34-00\$20 04-34-00120 04-34-02020	25 rxn/20 µl 250 rxn/20 µl 5000 rxn/20 µl
HOT FIREPol® MultiPlex Mix Ready To Load with 10 mM MgCl ₂	04-36-00\$20 04-36-00120 04-36-02020	25 rxn/20 µl 250 rxn/20 µl 5000 rxn/20 µl
HOT FIREPol® Blend Master Mix with 7.5 mM MgCl ₂	04-27-00\$15 04-27-00115 04-27-02015	25 rxn/20 µl 250 rxn/20 µl 5000 rxn/20 µl
HOT FIREPol® Blend Master Mix with 10 mM MgCl ₂	04-27-00S20 04-27-00120 04-27-02020	25 rxn/20 µl 250 rxn/20 µl 5000 rxn/20 µl
HOT FIREPol® Blend Master Mix with 12.5 mM MgCl ₂	04-27-00\$25 04-27-00125 04-27-02025	25 rxn/20 µl 250 rxn/20 µl 5000 rxn/20 µl
HOT FIREPol® Blend Master Mix with 15 mM MgCl ₂	04-27-00\$30 04-27-00130 04-27-02030	25 rxn/20 µl 250 rxn/20 µl 5000 rxn/20 µl
HOT FIREPol® Blend Master Mix Ready to Load with 7.5 mM MgCl ₂	04-25-00\$15 04-25-00115 04-25-02015	25 rxn/20 µl 250 rxn/20 µl 5000 rxn/20 µl
HOT FIREPol® Blend Master Mix Ready to Load with 10 mM MgCl ₂	04-25-00\$20 04-25-00120 04-25-02020	25 rxn/20 µl 250 rxn/20 µl 5000 rxn/20 µl
HOT FIREPol® Blend Master Mix Ready to Load with 12.5 mM MgCl ₂	04-25-00\$25 04-25-00125 04-25-02025	25 rxn/20 µl 250 rxn/20 µl 5000 rxn/20 µl
HOT FIREPol® Blend Master Mix Ready to Load with 15 mM MgCl ₂	04-25-00\$30 04-25-00130 04-25-02030	25 rxn/20 µl 250 rxn/20 µl 5000 rxn/20 µl

First Strand cDNA Synthesis		
	CAT. NO.	SIZE
FIREScript® RT cDNA synthesis MIX sample	06-16-0000S	20 rxn/20 μl
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	06-15-0000S 06-15-00050 06-15-00200	20 rxn/20 µl 50 rxn/20 µl 200 rxn/20 µl
FIREScript® KIT	06-13-0000S 06-13-00050 06-13-00200	20 rxn/20 µl 50 rxn/20 µl 200 rxn/20 µl
SOLIScript® RT cDNA synthesis MIX	06-37-0000S 06-37-00100 06-37-00500	20 rxn/20 µl 100 rxn/20 µl 500 rxn/20 µl
SOLIScript® RT cDNA synthesis KIT	06-35-0000S 06-35-00050 06-35-00200	50 rxn/20 μl 50 rxn/20 μl 200 rxn/20 μl
SOLIScript® KIT	06-33-0000S 06-33-00050 06-33-00200	50 rxn/20 µl 50 rxn/20 µl 200 rxn/20 µl

One-step RT-qPCR Kits		
	CAT. NO.	SIZE
SOLIScript® 1-step SolisGreen® Kit	08-63-0000S 08-63-00250	50 rxn/20 μl 250 rxn/20 μl
SOLIScript® 1-step Probe Kit	08-57-0000S 08-57-00250	50 rxn/20 μl 250 rxn/20 μl
SOLIScript® 1-step Multiplex Probe Kit	08-55-0000S 08-55-00250	50 rxn/20 μl 250 rxn/20 μl
SOLIScript® 1-step Multiplex Probe Kit (ROX)	08-59-0000S 08-59-00250	50 rxn/20 μl 250 rxn/20 μl
SOLIScript® 1-step Multiplex Probe Kit (Purple)	08-61-0000S 08-61-00250	50 rxn/20 μl 250 rxn/20 μl

Other PCR Reagents		
	CAT. NO.	SIZE
TERMIPol® DNA Polymerase (5 U/μΙ)	01-03-0000S 01-03-00500 01-03-02000	500 U 500 U 2000 U
HOT TERMIPol® DNA Polymerase (5 U/μΙ)	01-06-0000S 01-06-00500 01-06-02000	500 U 500 U 2000 U
dNTP Set	02-21-0001S 02-21-00100 02-21-00400	4x1 μmol 4x25 μmol 4x100 μmol
dNTP Mix	02-31-0001S 02-31-00020 02-31-00100	0.8 µmol 20 µmol 100 µmol
dUTP	02-41-0000S 02-41-00025	2.5 µmol 25 µmol
100 bp DNA Ladder Ready to Load	07-11-0000S 07-11-00050	1.5 µg 50 µg
1 kb DNA Ladder Ready to Load	07-12-0000S 07-12-00050	1.5 µg 50 µg
6x DNA Loading Dye Buffer Blue	07-01-0000S 07-01-00001 07-01-00010	0.1 ml 1 ml 10 ml
6x DNA Loading Dye Buffer Double Blue	07-02-0000S 07-02-00001 07-02-00010	0.1 ml 1 ml 10 ml

6x DNA Loading Dye Buffer Orange and Blue	07-03-0000S 07-03-00001 07-03-00010	0.1 ml 1 ml 10 ml
6x DNA Loading Dye Buffer Orange	07-04-0000S 07-04-00001 07-04-00010	0.1 ml 1 ml 10 ml
10x GC-rich Enhancer	05-16-0000S 05-16-00010 05-16-00050 05-16-00200	0.1 ml 1 ml 5 ml 20 ml
25 mM MgCl ₂	05-11-00025 05-11-00050 05-11-00200	2.5 ml 5 ml 20 ml
PCR Grade Water	water-025 water-100 water-500	25 ml 100 ml 500 ml

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