SOLIS BIODYNE

Product Catalogue 2019

Ambient Temperature Stable
PCR and qPCR Reagents

Greetings from the Solis BioDyne Team

Dear Partners,

The past year has been full of exciting developments for Solis BioDyne. Quality has always been the core value of our work. To ensure we match the high quality management requirements of our diagnostic sector partners, we implemented the ISO 13485 standard.

We have continued developing our reverse transcription portfolio and have released the first products in our one-step RT-PCR range, which you will already find in this catalogue.

Inspired by questions and discussions with our customers we will keep improving and hope to be the partner of choice in your molecular biology applications.

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

QUALITY SYSTEM CERTIFICATION DNV·GL ISO 13485

QUALITY SYSTEM CERTIFICATION DNV·GL ISO 9001

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SOLIS BIODYNE

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W: solisbiodyne.com

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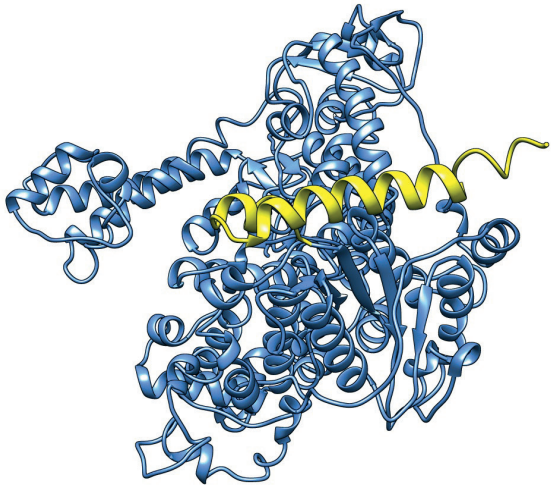
Reg. No: 10242922

Bank details: **Swedbank AS**
IBAN code: EE692200221005142234, SWIFT/BIC.: HABAEE2X
Bank address: Liivalaia 8, 15040 Tallinn, Estonia

Polypeptide Stabilization Technology: Stability TAG

3D MODEL OF FIREPOL® DNA POLYMERASE INCLUDING STABILITY TAG

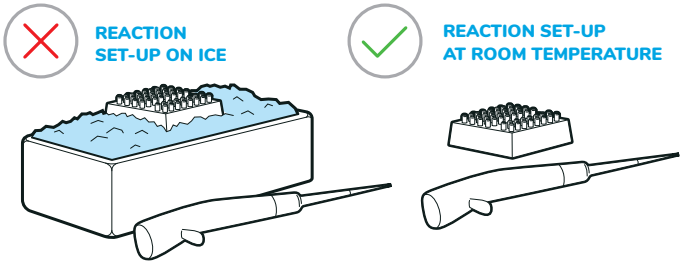


Taq DNA Polymerase Stability TAG

Ice-free reaction set-up

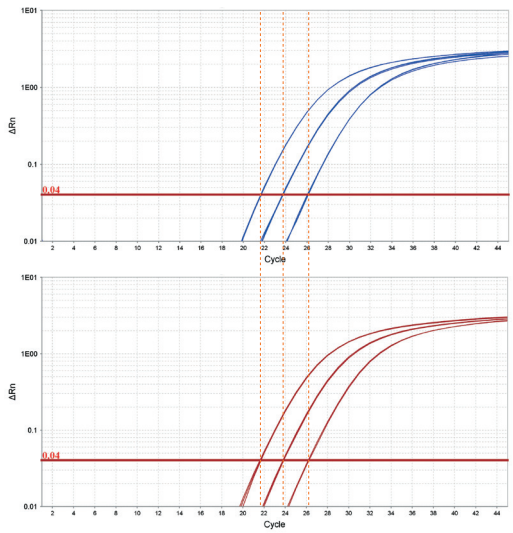
Our temperature stable enzymes allow you to change the way you work with enzymes that are usually extremely sensitive to temperature changes.

- 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!



5x HOT FIREPol® Probe Universal qPCR Mix -20°C

5x HOT FIREPol® Probe Universal qPCR Mix room temperature

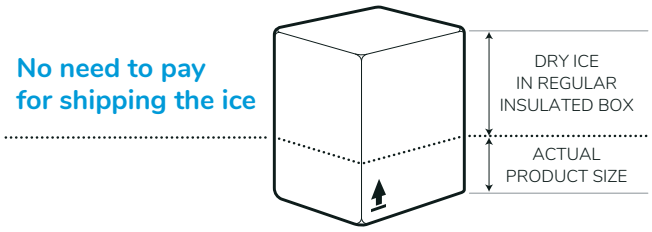
Our qPCR mix 5x HOT FIREPol® Probe Universal qPCR Mix shows no loss of activity after incubation at room temperature for 1 month!

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.

> Solis BioDyne products are excellent products and meet the following criteria:
>
> • **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

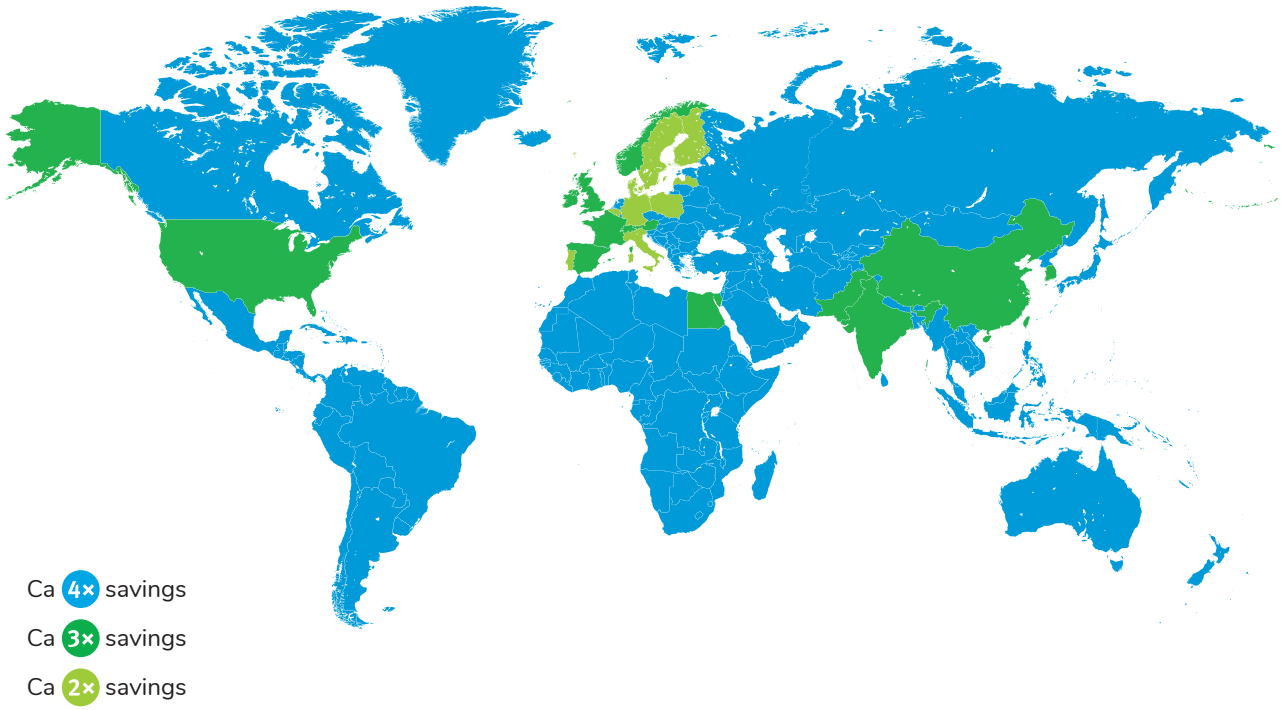


Ice-free shipping

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

- less material used for packaging
- lower package weight
- less fuel used for transportation
- lower shipping charges for you

Find out how much you can save when you don't have to pay for shipping the dry ice



qPCR Mixes: Specifications

5x concentration

All Solis BioDyne PCR and qPCR mixes are produced in 5x concentrations 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 ROX 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 QPCR MIX TO A STANDARD 2X QPCR MIX

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

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

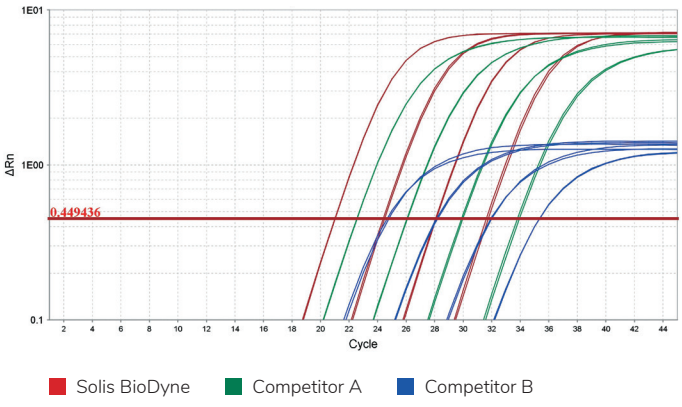
Quality Control

To ensure the highest quality and lot-to-lot consistency, strict quality control procedures are followed and documented in all stages of production. Certificates of Analysis are available for each lot upon request. Some tests that are performed with each lot of qPCR mixes:

- functional qPCR test with different templates and primer pairs
- amplification efficiency ≥ 10^5 fold
- no endodeoxyribonuclease, exodeoxyribonuclease or self-priming activities
- comparison with previous lots

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™ QuantStudio™ 6.



qPCR Mix Compatibility Table: Dye-based qPCR Mixes

qPCR Platforms	5x HOT FIREPol® SolisGreen™ qPCR Mix	5x HOT FIREPol® EvaGreen® qPCR Supermix	5x HOT FIREPol® EvaGreen® qPCR Mix Plus (ROX)	5x HOT FIREPol® EvaGreen® qPCR Mix Plus (no ROX)	5x HOT FIREPol® EvaGreen® qPCR Mix Plus (Capillary)	5x HOT FIREPol® EvaGreen® HRM Mix (ROX)	5x 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™, Mx4000PM	●	●	●				
BioRad: CFX96™, CFX384™	●	●		●			●
BioRad: 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					●		

qPCR Mix Compatibility Table: Probe-based qPCR Mixes

qPCR Platforms	5x HOT FIREPol® Probe qPCR Mix Plus (ROX)	5x HOT FIREPol® Probe qPCR Mix Plus (no ROX)	5x HOT FIREPol® Probe qPCR Mix Plus (Capillary)	5x HOT FIREPol® Probe Universal qPCR Mix	5x HOT FIREPol® Multiplex qPCR Mix	5x HOT FIREPol® Multiplex qPCR Mix (ROX)	5x 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™, Mx4000PM	●			●		●	
BioRad: 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			●				

* 5x HOT FIREPol® Multiplex qPCR Mix (Purple) is not compatible with Applied Biosystems QuantStudio™ 3.

5x HOT FIREPol® SolisGreen™ qPCR Mix

Description

Our newest real-time qPCR master mix based on DNA binding dye technology. SolisGreen™ is a new and unique dye with higher fluorescence, which enables detection of lower target concentrations.

Benefits

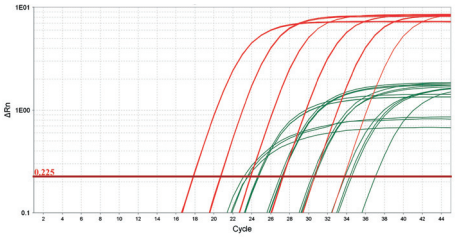
- improved detection of low target concentrations
- higher fluorescence level
- reaction set-up and shipment without dry ice
- compatible on most cyclers (see table on page 5)

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.

HIGHLY COMPETITIVE

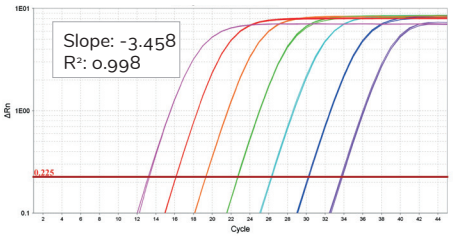
Amplification of six tenfold dilutions of human GAPDH cDNA with 5x HOT FIREPol® SolisGreen™ qPCR Mix (red) and a qPCR mix from another vendor (green). Reactions were performed on an Applied BioSystems™ QuantStudio™ 6.



Solis BioDyne Competitor B

EXCELLENT SENSITIVITY

Amplification of human PPIA cDNA with 5x HOT FIREPol® SolisGreen™ qPCR Mix on an Applied BioSystems™ QuantStudio™ 6 shows excellent linearity across different DNA concentrations. The amount of cDNA per reaction ranges from 100 ng to 0.1 pg.



100 ng 10 ng 1 ng 0.1 ng
10 pg 1 pg 0.1 pg

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 info@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	SIZE in ml
5x HOT FIREPol® SolisGreen™ qPCR Mix	08-46-0000S (free sample) 08-46-00001 08-46-00008 08-46-00020	50 250 2000 5000	0.2 1 8 20

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

5x HOT FIREPol® EvaGreen® qPCR Supermix

Description

Precisely-optimized real time qPCR master mix based on DNA binding dye technology. This master mix has been developed to give highly specific and sensitive results.

Benefits

- high sensitivity with low DNA concentrations
- 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

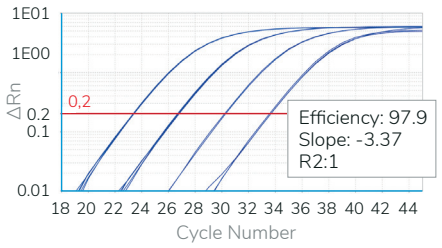
Reference:

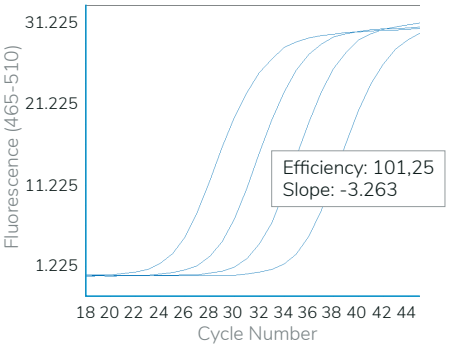
"I use the 5x HOT FIREPol Evagreen qPCR supermix to determine the expression level of low expressed genes after single cell RT in drop. This qPCR is for me a validation step before sending for sequencing. There are a lot of PCR inhibitors in my sample after RT in drop and my target cDNAs are in a very little amount. Indeed, I am studying low expressed genes and I am collecting just few thousand cells. However, I got good results with this qPCR mix, better than what I can obtain with a high fidelity polymerase. The melt curve are clean and I can see the variation in expression in between activated or not activated cells, even though those differences are very fine and even at high Ct values (around 35 cycles). Another advantage of this mix is the fact that it is 5x concentrated. I am doing 384 wells plate qPCR and a 5x mix is for sure more interesting and is cost-saving in comparison with a 2x mix like other suppliers provide. My colleagues also use this qPCR mix. 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

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.





Selected publications:

- Eskla, K.L., et al. Free Radical Biology and Medicine (2018).
- Hubackova, S. et al. Cell Death and Differentiation (2018).
- Rockenbach, M.F., et al. Tropical Plant Pathology (2018).
- Kohler, V., et al. Nucleic Acids Research (2018).
- Bednarek, K., et al. Am J Cancer Res (2018).
- Maksimov, V., et al. PLOS ONE (2018).

Send your sample request to info@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	SIZE in ml
5x 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:** info@solisbiodyne.com, via **skype:** solis.biodyne, via **phone:** +372 740 9960, or via our **e-shop:** solisbiodyne.com

5x HOT FIREPol® EvaGreen® qPCR Mix Plus

Description

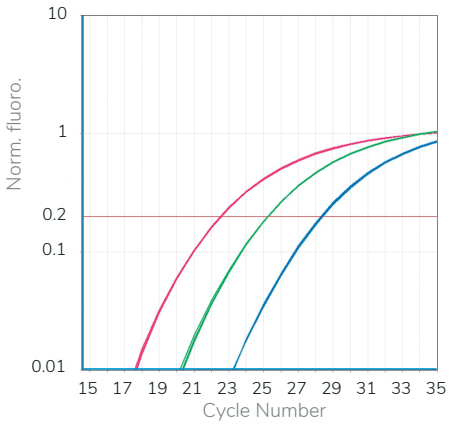
Cost-effective real time qPCR master mix based on DNA binding dye technology. Provides highly reliable and reproducible results.

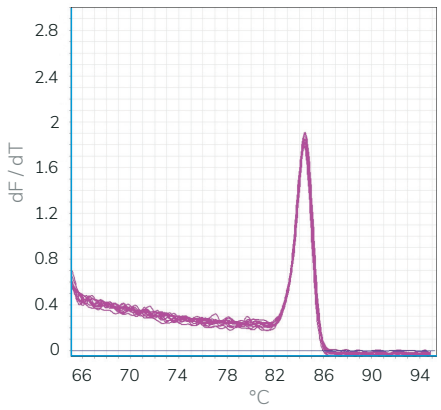
Benefits

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

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.





Researchers already trust EvaGreen® 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 been 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:

- Weltner, J., et al. Nature Communications (2018).
- Lagos, C., et al. Clinical Immunology (2018).
- Reinhart, R., et al. Cell Death and Differentiation (2018).
- Hammoudi, V., et al. PLOS Genetics (2018).
- Choi, D., et al. Scientific Reports (2018).
- Sarmiento-Villamil, J.L., et al. Molecular Plant Pathology (2018).

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PRODUCT	CAT. NO.	RXN/20 µl	SIZE in ml
5x 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
5x 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
5x 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

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5x HOT FIREPol® EvaGreen® HRM Mix

Description

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

Benefits

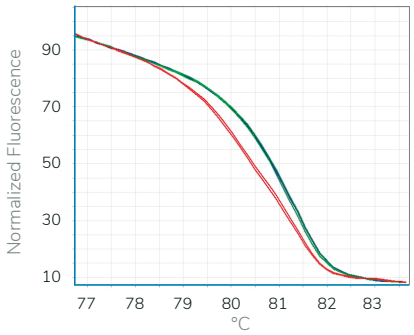
- reaction set-up and shipment without dry ice
- mixes available for ROX and no ROX cyclers
- sensitive EvaGreen® dye allows detection of DNA sequence variations

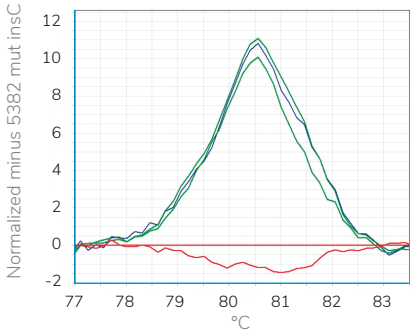
Did you know?

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

SENSITIVE HRM GENOTYPING

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





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

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

Selected publications:

- Morinha, F., et al. Conservation Genetics Resources (2018).
- Negrisolo, S., et al. European Journal of Human Genetics (2018).
- Yu, X., et al. Theoretical and Applied Genetics (2018).
- Grzegorzewska, A.E, et al. Vaccine (2018).
- Behboudi, H., et al. International Immunopharmacology (2018).

Send your sample request to info@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	SIZE in ml
5x 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
5x 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

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NEW
5x 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

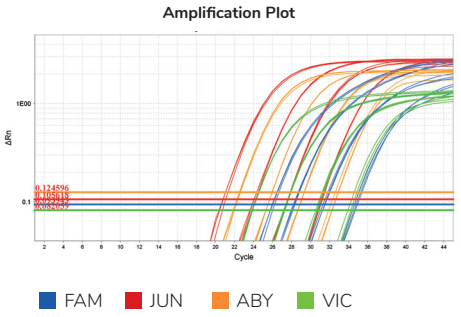
- analyze 1-4 targets in 1 reaction
- high specificity and sensitivity
- reaction set-up and shipment without dry ice
- robust amplification of GC-rich targets
- contains dUTP to prevent cross-contamination when used in combination with UNG
- wide instrument compatibility (see table on page 6)

Tip!

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

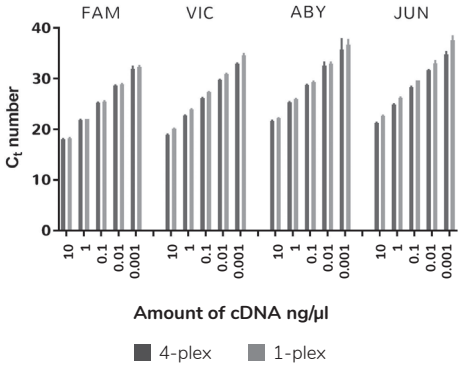
EXCELLENT FOR 4-PLEX ASSAYS

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 cycler using Purple dye for normalization.



SAME LEVEL OF SENSITIVITY WITH MULTIPLEXING

5x HOT FIREPol® Multiplex qPCR Mix (Purple) was used in 4-plex or 1-plex qPCR amplification with 5 tenfold serial dilutions of human cDNA (cDNA concentration in a reaction ranges from 10 ng/µl to 0.001 ng/µl). Reactions were performed with Applied BioSystems™ QuantStudio™ 6 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 info@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	SIZE in ml
5x HOT FIREPol® Multiplex qPCR Mix	08-01-0000S (free sample) 08-01-00001 08-01-00008 08-01-00020	50 250 2000 5000	0.2 1 8 20
5x HOT FIREPol® Multiplex qPCR Mix (ROX)*	08-02-0000S (free sample) 08-02-00001 08-02-00008 08-02-00020	50 250 2000 5000	0.2 1 8 20
5x HOT FIREPol® Multiplex qPCR Mix (Purple)*	08-03-0000S (free sample) 08-03-00001 08-03-00008 08-03-00020	50 250 2000 5000	0.2 1 8 20

* See the passive reference dye and probe reporter dye compatibility table on page 22.

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

5x HOT FIREPol® Probe Universal qPCR Mix

Description

Precisely-optimized real time qPCR master mix for probe based 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
- one qPCR 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

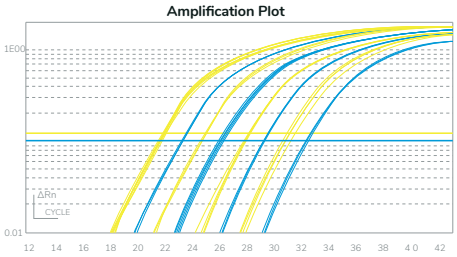
Reference:

> **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

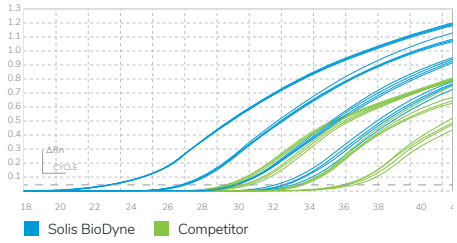
QPCR PERFORMANCE IN A DUPLEX REACTION:

Two genes 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) from both genes. 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 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.



Selected publications:

- 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 info@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	SIZE in ml
5x 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

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

5x 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

Researchers already trust Probe Plus

Reference:

> 5x HOT FIREPol® Probe qPCR Mix Plus (ROX) has been extensively used in our lab on a routine basis. Throughout the years, we have successfully analysed thousands of samples using this reliable, optimised, consumer- and budget-friendly solution provided by Solis BioDyne team.

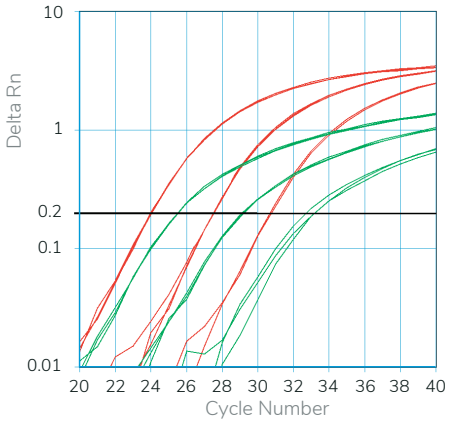
MARINA GRIGOROVA
PhD, Research Fellow of Human Molecular Genetics
University of Tartu, Estonia

Selected publications:

- Weissova, K., et al. Sleep Medicine (2018).
- Gryndler, M., et al. Mycorrhiza (2018).
- Cilia, G., et al. European Journal of Protistology (2018).
- Podralska, M., et al. BMC Cancer (2018).

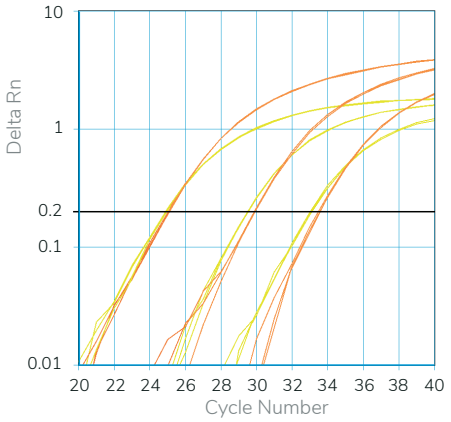
HIGHLY COMPETITIVE

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



QPCR PERFORMANCE IN A DUPLEX REACTION

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



Send your sample request to solis@sbd.ee

PRODUCT	CAT. NO.	RXN/20 µl	SIZE in ml
5x 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
5x 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
5x 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

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

Product Selection Guide: Standard PCR Enzymes and Master Mixes

	HOT START	FIDELITY VS TAQ	READY TO LOAD	AMPLIFICATION RANGE	CLONING TYPE	ROBUST ON GC	PAGE(S)
HOT FIREPol® DNA Polymerase	●	1x		5 kb	TA	* *	15
5x HOT FIREPol® GC Master Mix	●	1x		5 kb	TA	* * *	16
5x HOT FIREPol® Multiplex Mix	●	1x		3 kb	TA	* *	17
5x HOT FIREPol® Multiplex Mix Ready to Load	●	1x	●	3 kb	TA	* *	17
5x HOT FIREPol® Blend Master Mix	●	5x		5 kb	Blunt/TA	*	18-19
5x HOT FIREPol® Blend Master Mix Ready to Load	●	5x	●	5 kb	Blunt/TA	*	18-19
FIREPol® DNA Polymerase		1x		5 kb	TA	* *	20
5x FIREPol® Master Mix		1x		5 kb	TA	*	21
5x FIREPol® Master Mix Ready to Load		1x	●	5 kb	TA	*	21

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 $MgCl_2$ and an additive for difficult templates.

Benefits

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

Researchers already trust HOT FIREPol®

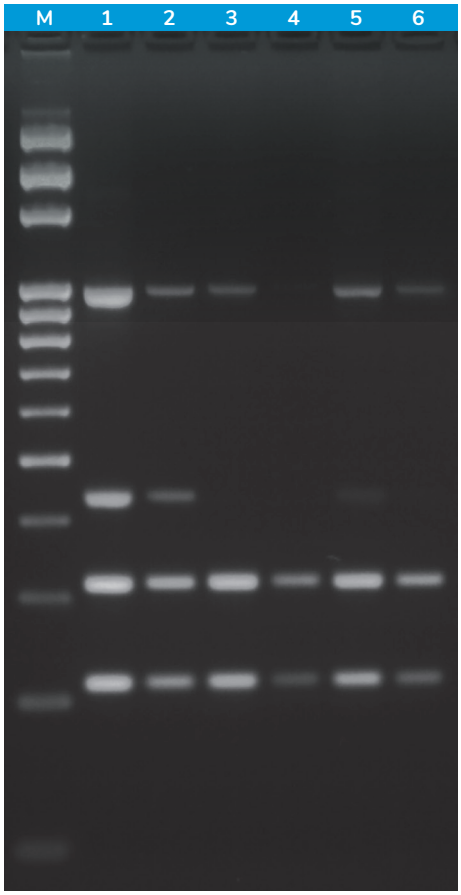
Reference:

> 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 genes 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 genes in both 10x dilutions.



Selected publications:

- Hammer, Q., et al. Nature Immunology (2018).
- Burgstaller, J.P., et al. Nature Communications (2018).
- Gupta, P.R., et al. Human Molecular Genetics (2018).
- Giehr, P., et al. Nucleic Acids Research (2018).
- Šebest, L., et al. American Journal of Physical Anthropology (2018).

Send your sample request to info@solisbiodyne.com

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

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

5x 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®, $MgCl_2$, 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 $MgCl_2$ 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 cause unspecific amplification.

Researchers already trust GC Master Mix

Reference:

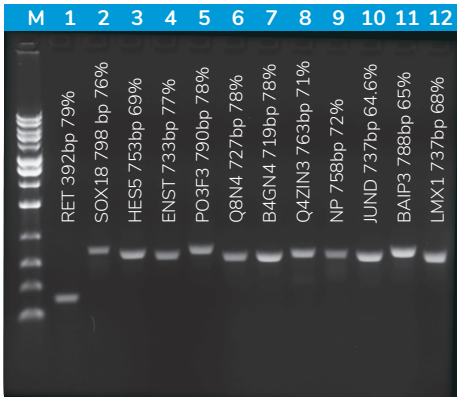
> In our lab, GC Master mix gave excellent results with low-abundance, difficult-to-amplify targets. Afterwards, these PCR products were cloned into expression vectors and sequenced - and vast majority of sequences were intact. So the GC Master mix has low mutation rate and is a good cloning tool as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

DR ILLAR PATA
IVEX Lab, Estonia

Publication: Maksimov, M., et *al.* Neuropsychologia (2015).

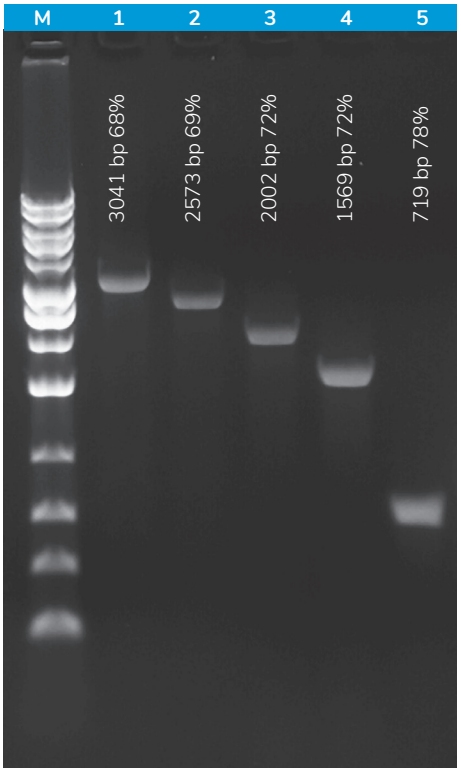
AMPLICONS OF VARIOUS GC-CONTENT

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 info@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	SIZE in ml
5x HOT FIREPol® GC Master Mix	04-33-00S15 (free sample) 04-33-00115 04-33-02015	25 250 5000	0.1 1 20

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

5x HOT FIREPol® MultiPlex Mix & MultiPlex Mix Ready to Load

Description

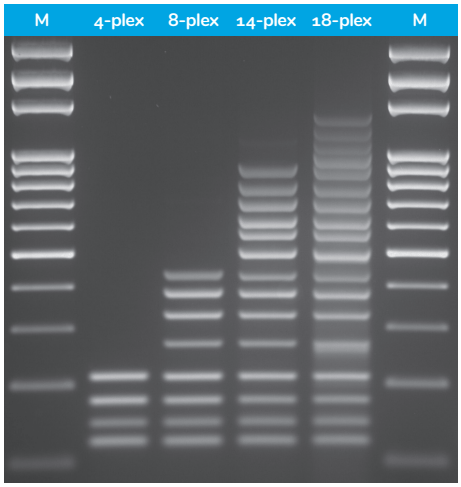
Precisely-optimized PCR master mix for multiplex PCR assays. This master mix contains thermostable hot-start Taq polymerase HOT FIREPol®, $MgCl_2$, dNTPs and buffer. You just need to add template, primers and water.

Benefits

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

SENSITIVE AND SPECIFIC RESULTS

Different genes from human gDNA were amplified in multiplex reactions using 5x HOT FIREPol® MultiPlex Mix. Amplicons ranging from 122 bp to 1340 bp show similar yield and excellent separation with simultaneous amplification of even 18 targets.



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

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 info@solisbiodyne.com

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

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

5x 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 Taq polymerase HOT FIREPol® this master mix contains a proofreading enzyme which offers enhanced performance.

Benefits

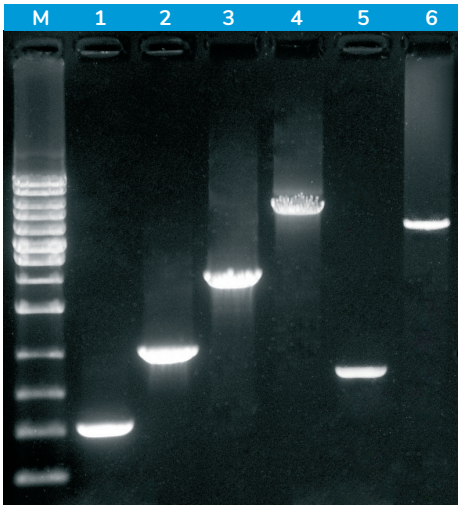
- increased yield, sensitivity and specificity
- up to 5x higher fidelity
- suitable for templates up to 5 kb
- reduced primer dimer formation
- reaction set-up and shipment without dry ice

Did you know?

$MgCl_2$ is needed for polymerase activity. Low $MgCl_2$ concentration can result in no PCR product, however too high $MgCl_2$ concentration can increase unspecific amplification. The optimal concentration varies within experiments but usually 1.5-2 mM is sufficient.

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 5x HOT FIREPol® Blend Master Mix Ready to Load with 7.5 mM $MgCl_2$.



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

Researchers already trust Blend

Reference:

> Solis BioDyne has proven to be a great company that has customer-oriented services in molecular work. 5x HOT FIREPol Blend Master Mix is convenient to use, store and produces high quality results. I know what I am saying because I have used this product in 2011, 2014 and now 2017, because it outperforms same products from other companies.

EMMY CHEPKOECH
PhD student
University of Eldoret, Kenya

Selected publications:

- 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 info@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	SIZE in ml
5x HOT FIREPol® Blend Master Mix with 7.5 mM $MgCl_2$	04-27-00S15 (free sample) 04-27-00115 04-27-02015	25 250 5000	0.1 1 20
5x HOT FIREPol® Blend Master Mix with 10 mM $MgCl_2$	04-27-00S20 (free sample) 04-27-00120 04-27-02020	25 250 5000	0.1 1 20
5x HOT FIREPol® Blend Master Mix with 12.5 mM $MgCl_2$	04-27-00S25 (free sample) 04-27-00125 04-27-02025	25 250 5000	0.1 1 20
5x HOT FIREPol® Blend Master Mix with 15 mM $MgCl_2$	04-27-00S30 (free sample) 04-27-00130 04-27-02030	25 250 5000	0.1 1 20

Send your sample request to info@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	SIZE in ml
5x 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
5x 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
5x 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
5x HOT FIREPol® Blend Master Mix Ready to Load with 15 mM $MgCl_2$	04-25-00S30 (free sample) 04-25-00130 04-25-02030	25 250 5000	0.1 1 20

FIREPol® DNA Polymerase

Description

Genetically modified thermostable Taq DNA polymerase that provides robust and reproducible results. FIREPol® DNA polymerase is supplied with 2 reaction buffers, 25 mM $MgCl_2$ 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®

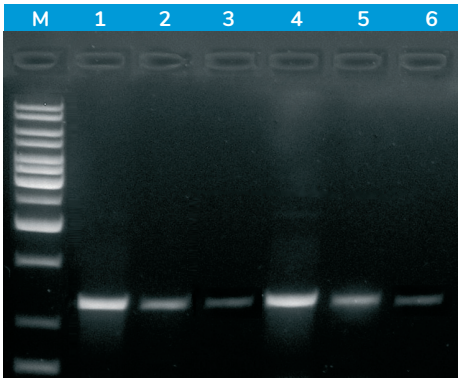
Reference:

> 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

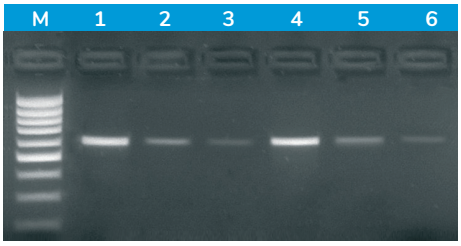
MOUSE GENOMIC DNA

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:

- Garcia-Martin, A.B., et al. Veterinary Microbiology (2018).
- Bhutada, G., et al. BBA - Molecular and Cell Biology of Lipids (2018).
- Babben, S., et al. BMC Genomics (2018).
- Buglione, M., et al. Mammalian Biology (2018).
- Zanatta, D.T., et al. Biological Journal of the Linnean Society (2018).

Send your sample request to info@solisbiodyne.com

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

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

5x 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®, $MgCl_2$, 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

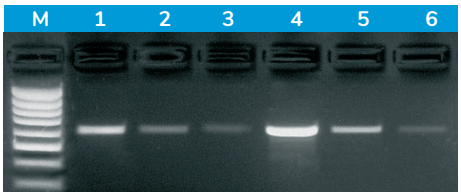
Reference:

> 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:

- Tamm, M., et al. Ecological Indicators (2019).
- Fedele, S. et al. Scientific Reports (2017).
- Mahfouz, N., et al. Plos One (2017).
- Nummert, G., et al. Virology (2017).
- Sakmanoglu, A., et al. Journal of Microbiological Methods (2017).

Send your sample request to info@solisbiodyne.com

PRODUCT	CAT. NO.	RXN/20 µl	SIZE in ml
5x FIREPol® Master Mix with 7.5 mM $MgCl_2$	04-11-00S15 (free sample) 04-11-00115	25 250	0.1 1
5x FIREPol® Master Mix with 12.5 mM $MgCl_2$	04-11-00S25 (free sample) 04-11-00125	25 250	0.1 1
5x 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
5x 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:** info@solisbiodyne.com, via **skype:** solis.biodyne, via **phone:** +372 740 9960, or via our **e-shop:** solisbiodyne.com

Product Selection Guide: One-step RT-PCR

		Nr of targets per reaction	GC-rich temp-lates	dUTP	Passive reference dye	Compatible cyclers	Incompatible probe reporter dyes	Page
Probe-based detection	**SOLIScript™ 1-step Probe Kit**	1-2	*	No	ROX	All cyclers	ROX JUN Texas Red	23
	SOLIScript™ 1-step Multiplex Probe Kit	1-4	***	Yes	None	All cyclers except Applied BioSystems™ and Agilent		24
	SOLIScript™ 1-step Multiplex Probe Kit (ROX)	1-4	***	Yes	ROX	Applied BioSystems™ and Agilent cyclers	ROX JUN Texas Red	24
	SOLIScript™ 1-step Multiplex Probe Kit (Purple)	1-4	***	Yes	Purple	Applied BioSystems™ cyclers with Mustang Purple® channel	Cy5	24
Dye-based detection	**One-step RT-qPCR kit for dye-based detection***					–	–	–
End-point detection	**One-step RT-PCR kit for end-point detection***					–	–	–

* Product description. These kits are currently in development and will be available soon.

NEW SOLIScript™ 1-step Probe Kit

Description

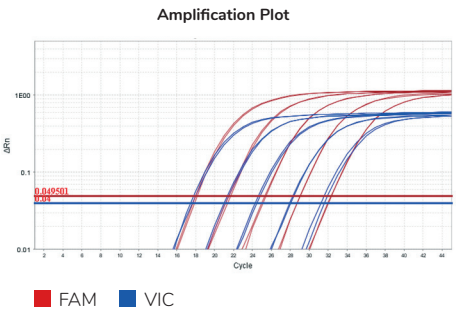
Convenient kit format for performing highly specific cDNA synthesis and probe based qPCR in a single tube. The kit contains qPCR mix, SOLIScript™ RT enzyme mix with RiboGrip™ RNase inhibitor, and nuclease free water.

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

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 total RNA (RNA amount ranges from 4000 pg/µl to 0.4 pg/µl per reaction). Reactions were performed with Applied BioSystems™ QuantStudio™ 6 cycler using ROX dye for normalization.



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

Send your sample request to info@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:** info@solisbiodyne.com, via **skype:** solis.biodyne, via **phone:** +372 740 9960, or via our **e-shop:** solisbiodyne.com

NEW SOLIScript™ 1-step Multiplex Probe Kit

Description

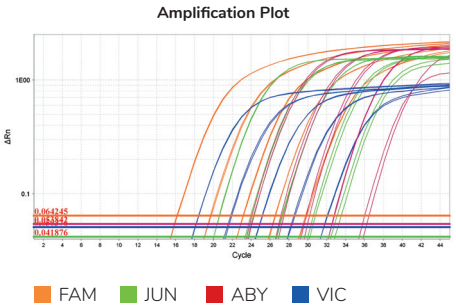
Convenient kit format for performing highly specific cDNA synthesis and probe based qPCR in a single tube. This kit was developed for sensitive and accurate RNA quantification with up to 4 targets in the same reaction. Multiplex compatibility and increased stability at room temperature make it ideal for high throughput RNA analysis. The kit contains qPCR mix optimized for multiplex reactions, SOLIScript™ RT enzyme mix with RiboGrip™ 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
- wide instrument compatibility (see table on page 22)

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 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 info@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:** info@solisbiodyne.com, via **skype:** solis.biodyne, via **phone:** +372 740 9960, or via our **e-shop:** solisbiodyne.com

Product Selection Guide: First Strand cDNA synthesis

	SPECIFICATION	PRODUCT FORMAT	REACTION TEMPERATURE	RNASE H ACTIVITY	PAGE(S)
FIREScript™ RT cDNA Synthesis Mix	Excellent enzyme for standard applications	• 3-vial-kit format • 4 priming options[a]	37°C-60°C	Full	26-27
FIREScript™ RT cDNA Synthesis Kit		• 7-vial-kit format • 4 priming options[a]	37°C-60°C	Full	26-27
FIREScript™ Kit		• enzyme and reaction buffer only	37°C-60°C	Full	26-27
SOLIScript™ RT cDNA Synthesis Mix	Superior specificity with complex templates and specific primers	• 3-vial-kit format • gene-specific primers only[b]	37°C-60°C	Reduced	28
SOLIScript™ RT cDNA Synthesis Kit		• 6-vial-kit format • 2 priming options[c]	37°C-60°C	Reduced	28
SOLIScript™ Kit		• enzyme and reaction buffer only	37°C-60°C	Reduced	28

[a] Primers provided with the product: oligo dT, random, oligo dT and random combined. Gene-specific 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™

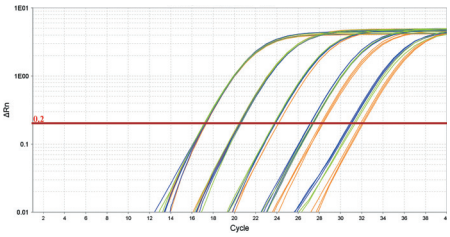
Reference:

"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

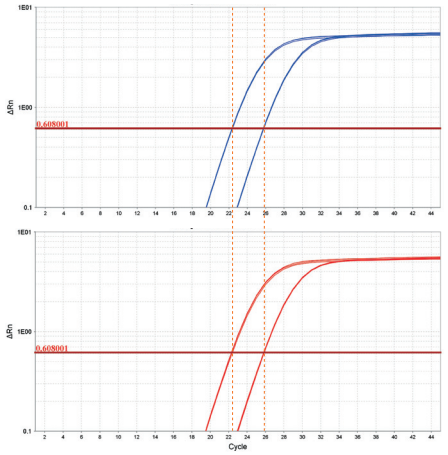
cDNA was synthesized with five tenfold human RNA dilutions using FIREScript™ (blue) and cDNA synthesis kits from competitor A (green) and competitor S3 (orange). Downstream qPCR reactions were performed with 5x HOT FIREPol® qPCR Supermix using ß2M primers on an Applied BioSystems™ QuantStudio™ 6.



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

EXCEPTIONAL STABILITY

Two tenfold RNA dilutions were reverse transcribed to cDNA using FIREScript™ RT that had been stored at -20°C (blue upper graph) and FIREScript™ RT that had been stored at room temperature for 4 weeks (red lower graph). Downstream qPCR reactions were performed using 5x HOT FIREPol EvaGreen Supermix. The results are equal for both storage conditions.



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

Selected publications:

- 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 info@solisbiodyne.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.

RiboGrip™ RNase Inhibitor

Description

Novel *in silico*-engineered, protein-based RNase inhibitor which inhibits RNase A. RiboGrip™ is extremely stable and will remain fully active for up to one month at room temperature.

Benefits

- reaction temperature up to 50°C
- reaction set-up and shipment without dry ice
- included in FIREScript™/SOLIScript™ RT cDNA Synthesis Kit and Mix

Send your sample request to info@solisbiodyne.com		
PRODUCT	CAT. NO.	RXN/20 µl
RiboGrip™ RNase Inhibitor	06-22-00400 (free sample) 06-22-01000 06-22-04000	20 50 200

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

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™

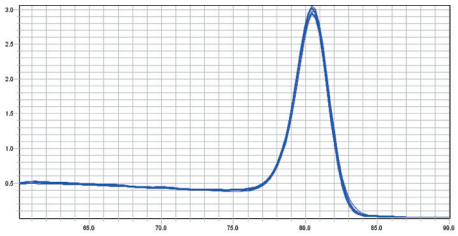
Reference:

> 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.

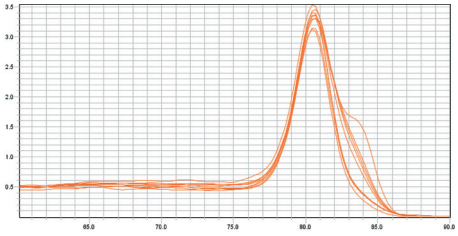
KIRILL JEFIMOV
University of Bergen, Norway

SUPERIOR SPECIFICITY

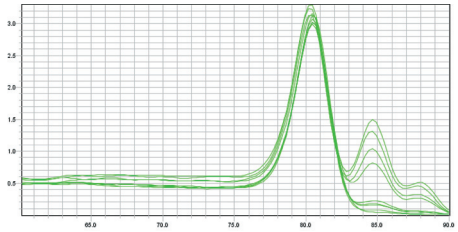
cDNA synthesis reactions were performed using a ß2M gene-specific primer at 55°C following protocols recommended by the suppliers. Downstream qPCR reactions were performed with 5x HOT FIREPol qPCR Supermix on an Applied BioSystems™ QuantStudio™ 6. Reactions in which cDNA was synthesized using SOLIScript™ RT (blue) have a highly specific qPCR melt curve compared to Competitor S3 (orange) and Competitor R (green).



Solis BioDyne SOLIScript™



Competitor S3



Competitor R

Send your sample request to info@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

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

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 $MgCl_2$.

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 info@solisbiodyne.com

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

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

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

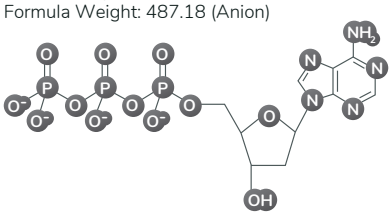
One solution of dATP, dTTP, dGTP and dCTP at 20 mM concentration each.

dUTP

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

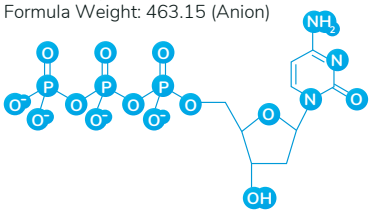
dATP

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



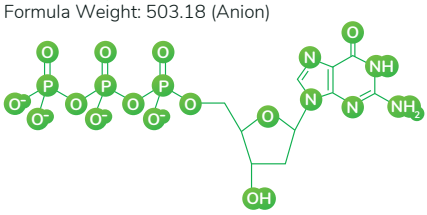
dCTP

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



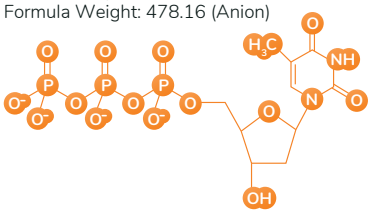
dGTP

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



dTTP

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



> 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

Send your sample request to info@solisbiodyne.com

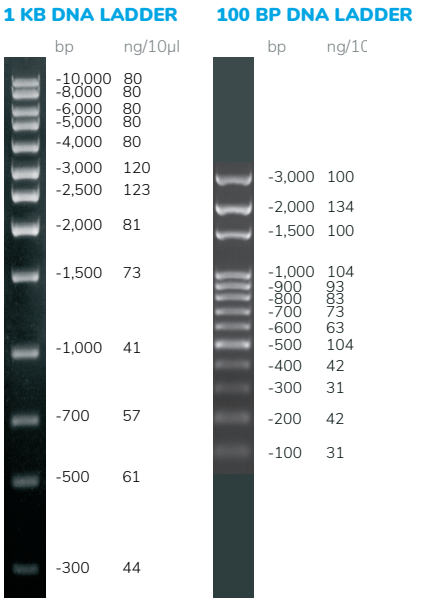
PRODUCT	CAT. NO.	SIZE
dNTP Set	02-21-0001S (free sample) 02-21-00100 02-21-00400	4x1 µmol / 4x0.01 ml 4x25 µmol / 4x0.25 ml 4x100 µmol / 4x1 ml
dNTP Mix	02-31-0001S (free sample) 02-31-00020 02-31-00100	0.8 µmol / 0.01 ml 20 µmol / 0.25 ml 100 µmol / 1.25 ml
dUTP	02-41-0000S (free sample) 02-41-00025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

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

100 bp DNA Ladder
1 kb DNA Ladder

Description

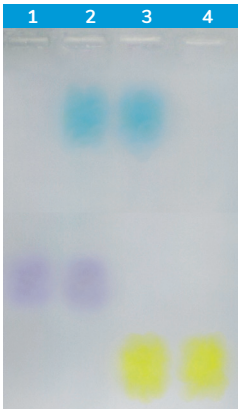
Solis BioDyne DNA ladders are convenient ready-to-use molecular weight markers for DNA fragment size determination on gel electrophoresis. The ladders are supplied in a loading buffer and are stable at ambient temperature. The 1 kb DNA Ladder contains 13 discrete DNA fragments ranging from 300 bp to 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
1	Blue
2	Double Blue
3	Orange and Blue
4	Orange

Send your sample request to info@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:** info@solisbiodyne.com, via **skype:** solis.biodyne, via **phone:** +372 740 9960, or via our **e-shop:** solisbiodyne.com

10x GC-rich Enhancer

Description

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

Applications

- additive for PCR reaction

25 mM $MgCl_2$

Description

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

Applications

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

PCR Grade Water

Description

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

Applications

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

Send your sample request to info@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
can be ordered via **e-mail:** info@solisbiodyne.com, via **skype:** solis.biodyne, via **phone:** +372 740 9960, or via our **e-shop:** solisbiodyne.com

Ordering

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

Our products can withstand ambient temperature up to 1 month without any loss of activity. However, regular storage at -20°C is recommended.

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: info@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

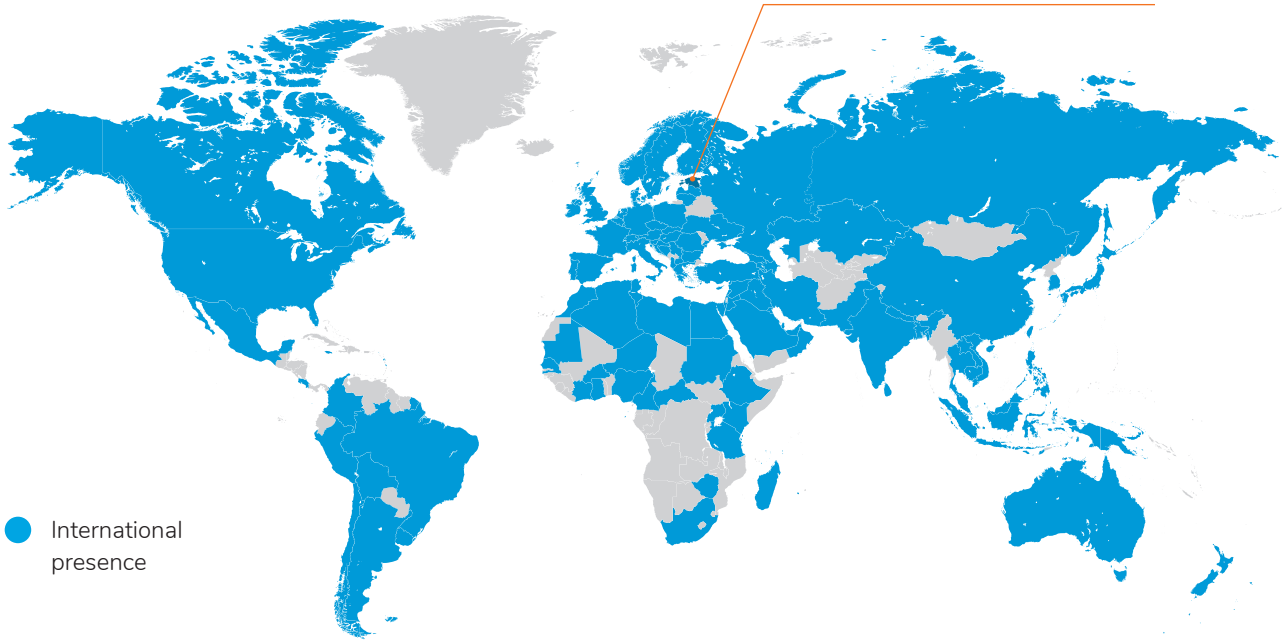
Checks are not accepted as a payment method.

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.

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



Distributors

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www.genelifesciences.com

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www.nextgene.my

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www.biosistemigrupa.com

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The most up-to-date list of distributors is available on our website **solisbiodyne.com**

Product List

qPCR Mixes

	CAT. NO.	SIZE
5x 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
5x HOT FIREPol® EvaGreen® qPCR Supermix	08-36-0000S 08-36-00001 08-36-00008 08-36-00020	50 rxn/20 µl 250 rxn/20 µl 2000 rxn/20 µl 5000 rxn/20 µl
5x 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
5x HOT FIREPol® EvaGreen® qPCR Mix Plus (no ROX)	08-25-0000S 08-25-00001 08-25-00008 08-25-00020	50 rxn/20 µl 250 rxn/20 µl 2000 rxn/20 µl 5000 rxn/20 µl
5x HOT FIREPol® EvaGreen® qPCR Mix Plus (Capillary)	08-26-0000S 08-26-00001 08-26-00008 08-26-00020	50 rxn/20 µl 250 rxn/20 µl 2000 rxn/20 µl 5000 rxn/20 µl
5x HOT FIREPol® EvaGreen® HRM Mix (ROX)	08-33-0000S 08-33-00001 08-33-00008 08-33-00020	50 rxn/20 µl 250 rxn/20 µl 2000 rxn/20 µl 5000 rxn/20 µl
5x HOT FIREPol® EvaGreen® HRM Mix (no ROX)	08-31-0000S 08-31-00001 08-31-00008 08-31-00020	50 rxn/20 µl 250 rxn/20 µl 2000 rxn/20 µl 5000 rxn/20 µl
5x HOT FIREPol® Multiplex qPCR Mix	08-01-0000S 08-01-00001 08-01-00008 08-01-00020	50 rxn/20 µl 250 rxn/20 µl 2000 rxn/20 µl 5000 rxn/20 µl
5x HOT FIREPol® Multiplex qPCR Mix (ROX)	08-02-0000S 08-02-00001 08-02-00008 08-02-00020	50 rxn/20 µl 250 rxn/20 µl 2000 rxn/20 µl 5000 rxn/20 µl
5x HOT FIREPol® Multiplex qPCR Mix (Purple)	08-03-0000S 08-03-00001 08-03-00008 08-03-00020	50 rxn/20 µl 250 rxn/20 µl 2000 rxn/20 µl 5000 rxn/20 µl
5x HOT FIREPol® Probe Universal qPCR Mix	08-17-0000S 08-17-00001 08-17-00008 08-17-00020	50 rxn/20 µl 250 rxn/20 µl 2000 rxn/20 µl 5000 rxn/20 µl
5x HOT FIREPol® Probe qPCR Mix Plus (ROX)	08-14-0000S 08-14-00001 08-14-00008 08-14-00020	50 rxn/20 µl 250 rxn/20 µl 2000 rxn/20 µl 5000 rxn/20 µl
5x HOT FIREPol® Probe qPCR Mix Plus (no ROX)	08-15-0000S 08-15-00001 08-15-00008 08-15-00020	50 rxn/20 µl 250 rxn/20 µl 2000 rxn/20 µl 5000 rxn/20 µl
5x HOT FIREPol® Probe qPCR Mix Plus (Capillary)	08-16-0000S 08-16-00001 08-16-00008 08-16-00020	50 rxn/20 µl 250 rxn/20 µl 2000 rxn/20 µl 5000 rxn/20 µl

Regular PCR Enzyme and Mixes

	CAT. NO.	SIZE
FIREPol® DNA Polymerase (5 U/µl)	01-01-0000S 01-01-00500 01-01-01000 01-01-02000	100 U 500 U 1000 U 2000 U
5x FIREPol® Master Mix with 7,5 mM $MgCl_2$	04-11-00S15 04-11-00115	25 rxn/20 µl 250 rxn/20 µl
5x FIREPol® Master Mix with 12.5 mM $MgCl_2$	04-11-00S25 04-11-00125	25 rxn/20 µl 250 rxn/20 µl
5x 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
5x 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/µl)	01-02-0000S 01-02-00500 01-02-01000	100 U 500 U 1000 U
5x 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
5x HOT FIREPol® MultiPlex Mix with 10 mM $MgCl_2$	04-34-00S20 04-34-00120 04-34-02020	25 rxn/20 µl 250 rxn/20 µl 5000 rxn/20 µl
5x HOT FIREPol® MultiPlex Mix Ready To Load with 10 mM $MgCl_2$	04-36-00S20 04-36-00120 04-36-02020	25 rxn/20 µl 250 rxn/20 µl 5000 rxn/20 µl
5x HOT FIREPol® Blend Master Mix with 7.5 mM $MgCl_2$	04-27-00S15 04-27-00115 04-27-02015	25 rxn/20 µl 250 rxn/20 µl 5000 rxn/20 µl
5x 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
5x HOT FIREPol® Blend Master Mix with 12.5 mM $MgCl_2$	04-27-00S25 04-27-00125 04-27-02025	25 rxn/20 µl 250 rxn/20 µl 5000 rxn/20 µl
5x HOT FIREPol® Blend Master Mix with 15 mM $MgCl_2$	04-27-00S30 04-27-00130 04-27-02030	25 rxn/20 µl 250 rxn/20 µl 5000 rxn/20 µl
5x HOT FIREPol® Blend Master Mix Ready to Load with 7.5 mM $MgCl_2$	04-25-00S15 04-25-00115 04-25-02015	25 rxn/20 µl 250 rxn/20 µl 5000 rxn/20 µl
5x HOT FIREPol® Blend Master Mix Ready to Load with 10 mM $MgCl_2$	04-25-00S20 04-25-00120 04-25-02020	25 rxn/20 µl 250 rxn/20 µl 5000 rxn/20 µl
5x HOT FIREPol® Blend Master Mix Ready to Load with 12.5 mM $MgCl_2$	04-25-00S25 04-25-00125 04-25-02025	25 rxn/20 µl 250 rxn/20 µl 5000 rxn/20 µl
5x HOT FIREPol® Blend Master Mix Ready to Load with 15 mM $MgCl_2$	04-25-00S30 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
RiboGrip™ RNase Inhibitor	06-22-00400 06-22-01000 06-22-04000	20 rxn/20 µl 50 rxn/20 µl 200 rxn/20 µl

One-step RT-qPCR Kits

	CAT. NO.	SIZE
SOLIScript™ 1-step Probe Kit	08-57-0000S 08-57-00250	50/20 µl 250/20 µl
SOLIScript™ 1-step Multiplex Probe Kit	08-55-0000S 08-55-00250	50/20 µl 250/20 µl
SOLIScript™ 1-step Multiplex Probe Kit (ROX)	08-59-0000S 08-59-00250	50/20 µl 250/20 µl
SOLIScript™ 1-step Multiplex Probe Kit (Purple)	08-61-0000S 08-61-00250	50/20 µl 250/20 µl

Other PCR Reagents

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