



PCR and qPCR solutions

- Industry leading PCR and qPCR reagents
- Trusted plastic consumables
- High quality PCR and qPCR instruments

Industry leading PCR enzymes and kits

PCR

Thermo Scientific multiple polymerases and master mixes deliver top performance over a range of applications, from Standard PCR to High-Fidelity and Direct PCR.

Best-in-class High-Fidelity DNA Polymerases – Phusion DNA Polymerases

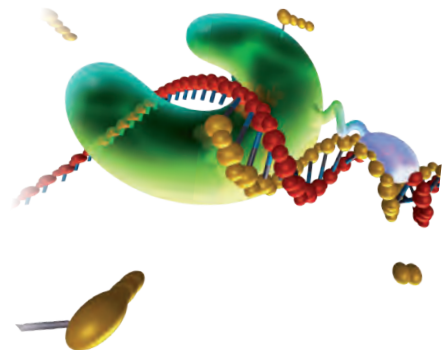
- Highly accurate amplification
- Short PCR protocols
- Minimal optimization
- Specific PCR products
- Available also as hot start and fast master mix formulations

www.thermoscientific.com/phusion

Shortcut to PCR – Thermo Scientific Direct PCR Kits

- No DNA purification needed, sample added directly to PCR mix
- Significant savings in time and cost
- Simple protocols, minimal hands-on time
- For plant and animal tissues, human specimen and blood

www.thermoscientific.com/directpcr



CHOOSE THE BEST ENZYME FOR YOUR APPLICATION

DO YOU NEED A HIGH-FIDELITY PCR ENZYME WITH A VERY LOW ERROR RATE?

NO

Do you need increased specificity and/or do you set up PCR reactions in a room temperature?

YES

Do you need increased specificity and/or do you set up PCR reactions in a room temperature?

NO

Do you amplify very long (>20 kb) targets?

YES

Would you benefit from faster cycling and higher yields?

NO

Do you need very fast cycling times for time savings?

YES

• Phusion Hot Start II High-Fidelity DNA Polymerase

NO

Is dUTP incorporation required in your PCR?

YES

• Long PCR Enzyme Mix*

NO

• Maxima Hot Start *Taq* DNA Polymerase
• Maxima Hot Start Green PCR Master Mix

YES

• Phire Hot Start II DNA Polymerase

NO

• Phusion High-Fidelity DNA Polymerase
• Phusion High-Fidelity PCR Master Mixes

YES

• Phusion Flash High-Fidelity PCR Master Mix

NO

Would you like to have a colored polymerase that enables direct loading of PCR product to the gel?

YES

• *Taq* DNA Polymerase
• PCR Master Mix

NO

• DreamTaq DNA Polymerase
• DreamTaq PCR Master Mix

YES

• DreamTaq Green DNA Polymerase
• DreamTaq Green PCR Master Mix



* Not available in US.

DIRECT PCR – A NEW SHORTCUT TO FAST RESULTS!

Complete selection of qPCR reagents



Our qPCR reagents have been engineered to give maximum sensitivity and reproducibility. You can choose optimized master mixes for both fast and standard protocols, and minimize pipetting errors by choosing colored reagents. The pre-designed qPCR gene-expression assays offer convenient a solution for gene-specific quantification with a single assay.

Thermo Scientific Maxima qPCR Master Mixes for standard qPCR

- Specificity – Maxima Hot Start Taq plus optimized buffer eliminates nonspecific amplification/formation of primer dimers
- Sensitivity – detects low copy number targets
- Wide linear range – accurate quantification across nine orders of magnitude

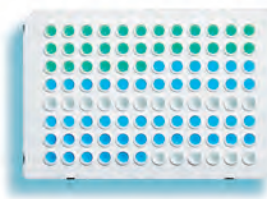
Thermo Scientific DyNAmo Flash Kits for fast qPCR

- Extremely fast protocols – combined annealing and extension step of only 15 s
- Specificity and sensitivity – detection of a wide range of template concentrations

Thermo Scientific DyNAmo ColorFlash Kits for fast qPCR

All the benefits of DyNAmo Flash Kits, plus:

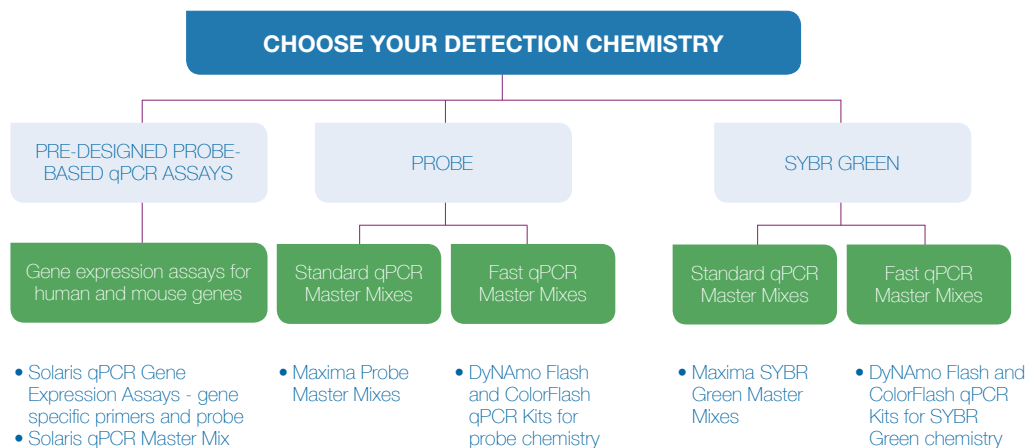
- Multi-color reagent system (blue master mix, yellow sample buffer)
- Minimized risk of pipetting errors during reaction setup
- Especially beneficial when using white reaction vessels



Thermo Scientific Solaris qPCR Gene Expression Assays - for human and mouse genomes

- Pre-designed MGB-probe and primer assays – minimal optimization requirements
- Superbase incorporation – one optimal design per gene target detects all splice variants

www.thermoscientific.com/qpcrsolution



Enhanced solutions for reverse transcription



Thermo Scientific products offer multiple solutions for reverse transcription for both PCR and qPCR applications.

Thermo Scientific Maxima First Strand cDNA Synthesis Kit for RT-qPCR

- Sensitive and reproducible – cDNA synthesis from a wide range of total RNA amounts (1 µg - 5 µg)
- Increased synthesis rates – complete cDNA synthesis in 15-30 minutes
- High yields – full length cDNA up to 20 kb in length
- Increased reaction temperatures – active up to 65°C
- Increased reproducibility – reduced bias

RevertAid Premium First Strand cDNA Synthesis Kit for cloning and difficult templates*

- Increased reaction temperatures – the first strand of cDNA can be synthesized within the 50-65°C temperature range
- High yields of full-length first strand cDNA with RNA templates up to 20 kb
- Flexible priming – oligo(dT)₁₈, random hexamer or gene-specific primers

Complete kits for RT-PCR and RT-qPCR

- Verso 1-Step Kits for RT-qPCR
 - For both SYBR Green and probe chemistries
- Verso 1-step RT-PCR Kits
 - Standard and hot start enzyme formulations
 - RT enhancer included
- Phusion RT-PCR Kit
 - Complete 2-step kit for high-fidelity RT-PCR

www.thermoscientific.com/rt

CHOOSE THE BEST RT ENZYME FOR YOUR APPLICATION				
APPLICATIONS	ROUTINE PERFORMANCE		ENHANCED PERFORMANCE	
	RevertAid Reverse Transcriptase ¹	RevertAid H Minus Reverse Transcriptase ²	RevertAid Premium Reverse Transcriptase ³	Maxima Reverse Transcriptase
RT-PCR up to 5 kb ⁴	● ● ● ●	● ● ● ●	● ● ● ● ● ●	● ● ● ● ● ●
RT-PCR 5-20 kb ⁴	● ●	● ● ●	● ● ● ● ● ●	● ● ● ● ● ●
Full length cDNA 5-20 kb	● ●	● ● ●	● ● ● ● ● ●	● ● ● ● ● ●
cDNA labeling	● ●	● ● ●	● ● ● ● ● ●	● ● ● ●
RACE/Primer extension	● ⁵	● ● ● ● ● ●	● ● ● ● ● ●	● ● ⁵

¹ Not available in Canada
² Not available in US
³ Not available in US and Canada
⁴ At their optimal temperatures
⁵ Not for RACE

Available as enzyme kits and first strand cDNA synthesis kits.

* Not available in US and Canada. In these countries we recommend Maxima Universal First Strand cDNA Synthesis Kit.



High-quality instruments & plastic consumables



High quality for Fast and Conventional PCR Thermo Scientific Piko and Arktik Thermal Cyclers

- High-quality Piko® Thermal Cyclers represent the next generation of PCR instrumentation. The Piko Thermal Cycler is based around the 24-well and 96-well Piko PCR Plate.
- Arktik™ Thermal Cycler is a reliable and flexible PCR instrument for the everyday requirements of any laboratory. It is suitable for a wide range of applications from individual reactions to high-throughput projects.

www.thermoscientific.com/piko, www.thermoscientific.com/arktik



Real-Time. Any Time. Now within your reach. Thermo Scientific PikoReal Real-Time PCR System*

- The PikoReal® Real-Time PCR System is designed to fit into your lab, even when bench-top space is limited. Offering an exceptionally small footprint this qPCR instrument is ideal for personal use and light enough for field applications. The PikoReal System also delivers innovative features and outstanding performance.

www.thermoscientific.com/pikoreal



Complete range of plastic consumables Tubes

- Individual tubes and strip tubes

Plates

- 24, 48, 96 and 384-well plates and Piko UTW PCR Plates

Sealing options

- Cap Strips, Adhesive Seals and Storage Plate Sealing

Storage plates

- 48-Well, 96-Well and 384-Well Storage Plates

Barcoding

- Reliable sample tracking

www.thermoscientific.com/pcrplastics



Piko Thermal Cycler

* Not available in Canada, Brazil, UK, Germany, Austria, Switzerland, Italy, Spain, France, Belgium, the Netherlands, Liechtenstein, Denmark and Sweden.

Everything for PCR and qPCR

The Thermo Scientific PCR and qPCR portfolio has everything you need for a successful run: reagents, instruments and plastic consumables. Our innovative portfolio is assembled by combining the state-of-the-art product lines from ABgene, Finnzymes and Fermentas. The within – themselves born of scientific breakthroughs – are accelerating discovery in life science, and our aim is to continue to develop new tools to increase your efficiency and enhance your effectiveness.

www.thermoscientific.com/pcr

For further information visit
www.thermoscientific.com/pcr

Technical Support:

North America

techservice.genomics@thermofisher.com

Ordering information:

United States

For customer service, call 1-800-766-7000.

To fax an order, use 1-800-926-1166.

To order online: www.fishersci.com

Canada

For customer service, call 1-800-234-7437.

To fax an order, use 1-800-463-2996.

To order online: www.fishersci.ca

BN0110126

Piko Thermal Cycler, Arktik Thermal Cycler and PikoReal Real Time PCR System are licensed under U.S. Patent Nos. 5,552,580 and 5,496,517.

Piko Thermal Cycler and Arktik Thermal Cycler: Purchase of this instrument conveys a limited, non-transferable immunity from suit for the purchaser's own internal research and development and applied fields other than human in vitro diagnostics under one or more of Canadian Patent 1,339,653, U.S. Patent 5,475,610 (claims 160-163 only) or corresponding claims in their unexpired non-U.S. counterparts owned by Applied Biosystems.

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To fax an order, use 1-800-926-1166.
To order online: www.fishersci.com

In Canada:
For customer service, call 1-800-234-7437.
To fax an order, use 1-800-463-2996.
To order online: www.fishersci.ca

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