



Takyon™

Amplification Technologies

qPCR • RT-qPCR • PCR

For Life Science Research

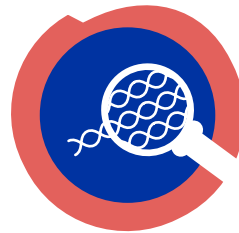
- > qPCR/RT-qPCR Takyon™ kits
- > qPCR control assays
- > qPCR plastics
- > PCR kits and reagents
- > Custom formulations







Highly consistent
quality reagents



Clear detection of
low copy targets



Maximum **reproducibility**
of results

RELIABLE TOOLS FOR AMPLIFICATION, DETECTION AND QUANTIFICATION OF NUCLEIC ACIDS

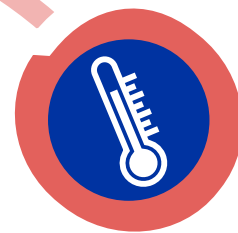
For over a decade Eurogentec has forged a strong reputation for developing trusted tools for qPCR and PCR applications. We bring you solutions, from individually performing reagents and consumables to ready-to-use kits.



Assay **dispensing services**
for process automation



Custom formulations
for demanding projects



Innovative dry format

qPCR/RT-qPCR/PCR

qPCR
& RT-qPCR

PCR

Custom
services

Primer
& Probes

Plastics

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FROM PCR TO qPCR

Since its creation in 1983, the PCR has gained interest in molecular identification, sequencing and genetic engineering and is no more restricted to the amplification of low amount targets. However the PCR technology remains an end-point method which still requires a downstream processing after amplification (e.g.: a running gel) to detect and identify the amplified product.

In contrast Real-time PCR technology relies on the signal intensity of a fluorescent reporter dye which increases proportionally with the sample amount. The reaction progress is then monitored in live in closed tubes, significantly reducing hands-on time and contamination risks.

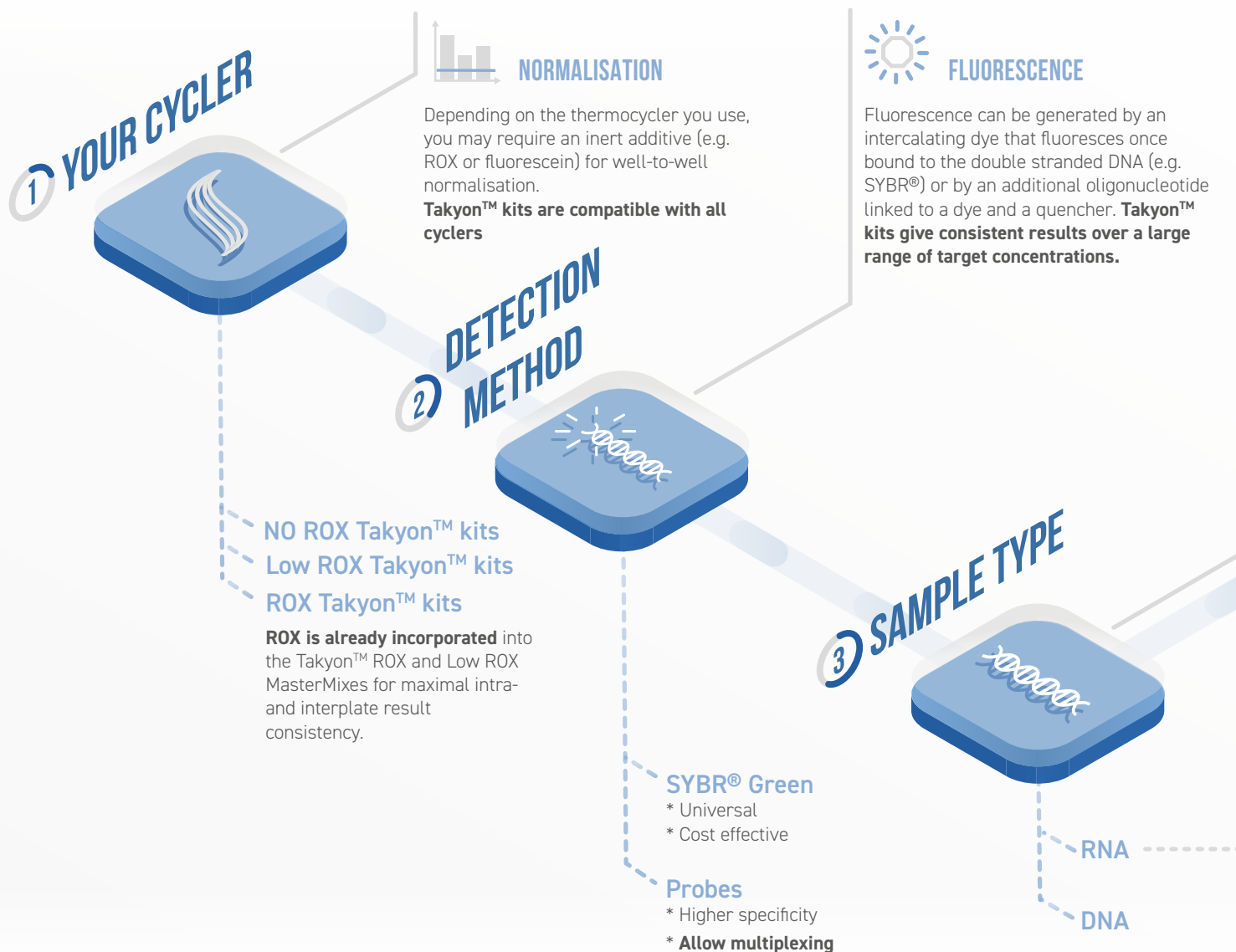
Real-time PCR is frequently used in research and diagnostic assays to precisely detect or quantify the starting template copy number. Result accuracy is also requested for demanding applications such as gene expression and miRNA analysis, Single Nucleotide Polymorphism (SNP) genotyping... and is mainly linked to the reproducibility of the assay.

Different parameters such as the buffer composition or the efficacy of the polymerase may influence result quality and consistency. To ensure successful qPCR reactions, Eurogentec has developed various kit components including a proprietary Takyon™ fusion enzyme and performing reagents as well as efficient consumables you can rely on durably.

qPCR/ RT-qPCR range

Inspired by the faster than light particle (Tachyon), the Takyon™ qPCR line from Eurogentec has been designed to shorten your qPCR runs. Thanks to a better affinity to DNA, and combined to an optimised reaction buffer, the new Takyon™ fusion polymerase ensures sensitivity and fast delivery of accurate and reproducible results. In this chapter, you will find ready-to-use kits, plastics, controls and reagents to achieve your qPCR and RT-qPCR assays successfully. ■

⇒ TAKYON™ KITS FOR qPCR & RT-qPCR ASSAYS



BENEFITS OF TAKYON™ KITS

Universal capabilities

The Takyon™ kits are compatible with all cyclers and applications including high throughput and on the field testing.

Large dynamic range

The Takyon™ kits give consistent amplification results over a large range of initial target concentrations

Robust formulation

The fusion polymerase is highly efficient and less sensitive to inhibitors. This allows amplification with some difficult templates like biological fluids and viruses.

Small reaction volumes

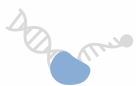
The high sensitivity of the Takyon™ kits combined to the highly concentrated 5X format give reliable results even in small volume reaction.

Suitable for multiplex

The Takyon™ kits allow the detection of multiple targets in a single reaction tube.

GOOD TO KNOW

To help you in your kit selection, a convenient **online qPCR selector** is available on <http://www.eurogentec.com/qpcr-selector.html>. You can also evaluate a sample of any MasterMix for free and benefit from a 50% discount on your first kit order.



REVERSE TRANSCRIPTION

If your starting material is RNA, you have to perform the Reverse Transcription (RT) to get cDNA material before starting your qPCR assay. This can be done in a One-Step or a Two-Step approach.

5 OPTIONS

4 KIT FORMAT



Two-step

Reverse transcription and amplification are performed in separate reactions

One step¹

Reverse transcription and amplification in a closed tube

- * **Reduced contamination** risk
- * Simple process
- * Highly **robust** performance reverse transcriptase
- * **Improved performance on difficult virus** with the additive.

Core kit

Individually optimised assay component

- * Cost effective
- * Maximum flexibility
- * Maximum assay performance through component concentration optimisation

Master Mix

- * Ready-to-use all-in-one qPCR reagent
- * Maximum reproducibility
- * Minimal contamination risk

Wet

- * 2 X concentrated
- * 5 X concentrated for volume optimization thanks to the **high sensitivity of Takyon™ kits**

Dry

- * Stable at room temperature
- * Eco-friendly
- * Performant
- * Flexible

Visualisation

The inert blue dye allows you to visualise dispensing errors at a glance and avoid aberrant results before they occur. This is particularly true when using white plates, known for their superior performances.

Carry over prevention

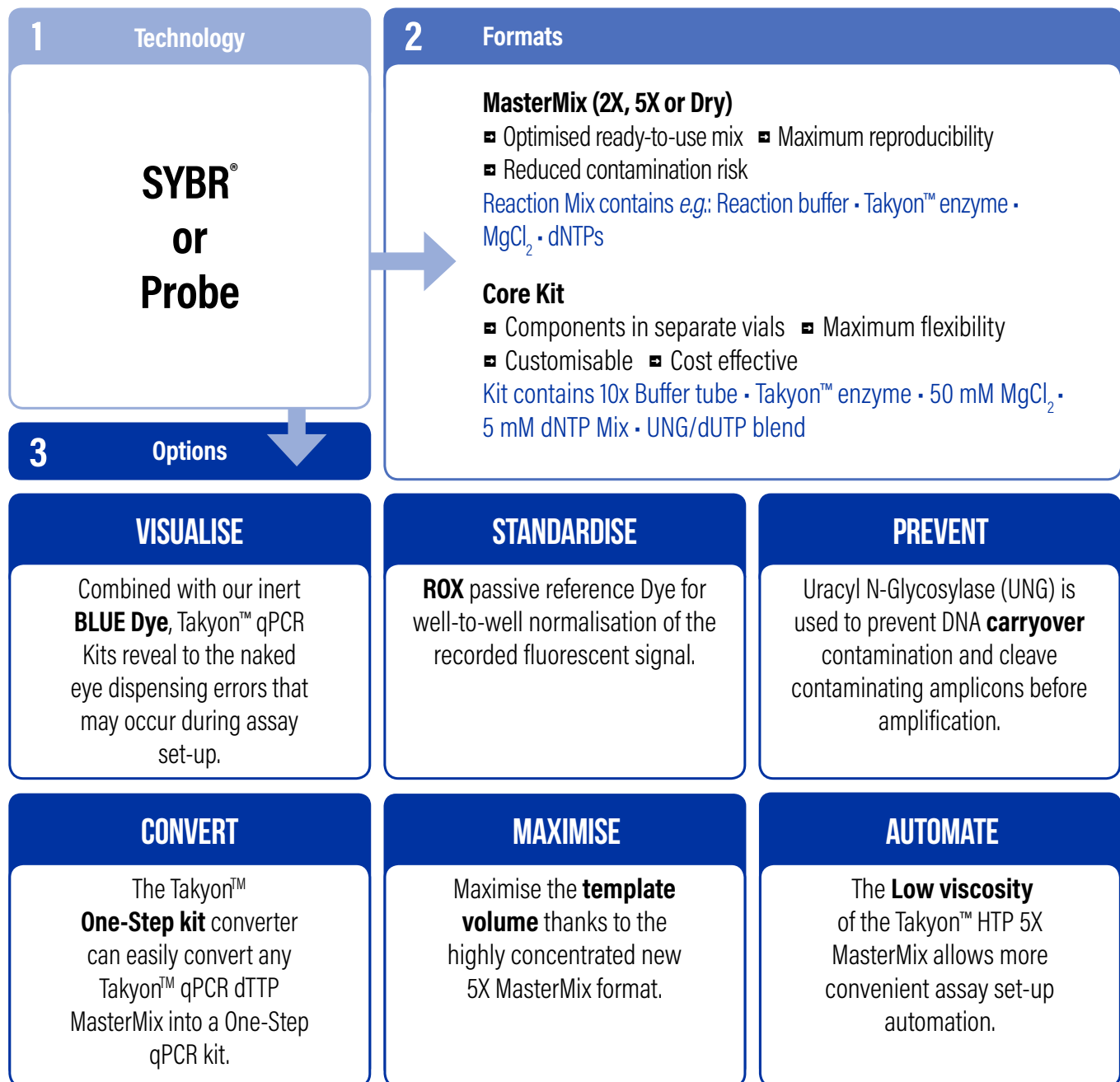
- * Mix containing dUTP and UNG,
- * Any trace of DNA molecule from previous reaction containing dUTP will be removed by the action of the UNG.

Assay automation

The low viscosity HTP Takyon™ kits are perfectly suited for assay set-up automation.

1. Any Takyon™ dTTP Master Mix for qPCR assays can easily be converted into a one-step RT-qPCR kit by using the Takyon™ **One-Step kit converter** simply combining the two.

GLOBAL VIEW OF TAKYON KITS



TAKYON™ DRY

Besides the liquid format, Takyon™ MasterMixes for Probe Assays are also available in a lyophilised format. Takyon™ Dry kits are recommended for on the field assays or for any other usages especially when cold chain becomes an issue.



TAKYON™ DRY ADVANTAGES

Eco-friendly and cost-effective

Takyon™ Dry reagents are environmental friendly. Ambient shipping allows for lightweight, dry ice- and polystyrene foam-free parcels while room temperature storage circumvents the need for a refrigerator.

Stable at room temperature

The lyophilisation process makes the reagents stable for 18 months at ambient temperature (up to 35 °C), greatly simplifying storage and handling of the kits.

Performant

Make no compromise on performance! Takyon™ Dry reagents including the new robust **Takyon™ fusion enzyme** demonstrate equivalent reliable and sensitive performance to that of the efficient and sensitive in-solution DNA and RNA Takyon™ MasterMixes.

Flexible

Takyon™ Dry mix can be instantly reconstituted in any volume up to a 5X concentrated MasterMix

FIND THE PRODUCT MATCHING YOUR THERMOCYCLER

Some thermocyclers use fluorescent dyes to allow well-to-well normalisation. To meet any option, Eurogentec offers kits with passive references (ROX or fluorescein) already incorporated into the mix but also kits without passive reference**.

The lexicon below guides you to the right ordering information in tables.

Cycler Group	Cycler Group	Cycler Group
A	G	P
<ul style="list-style-type: none"> ● 1 ABI Prism® 5700 (p.9) ● 1 ABI Prism® 7000 (p.9) ● 1 ABI Prism® 7300 (p.9) ● 2 ABI Prism® 7500 & FAST 7500 (p.9) ● 1 ABI Prism® 7700 (p.9) ● 1 ABI Prism® 7900 & FAST 7900 (p.9) ● 1 ABI Step One & Plus (p.9) ● 2 ABI ViiA™7 (p.9) ● 3 AriaMx (p.10) 	<ul style="list-style-type: none"> ● 1 GeneAmp® SDS 5700 (p.9) 	<ul style="list-style-type: none"> ● 3 PiKoReal™ (p.10)
C	I	Q
<ul style="list-style-type: none"> ● 3 CFX384 (p.10) ● 3 CFX96 (p.10) ● 3 Chromo 4 (p.10) 	<ul style="list-style-type: none"> ● 4 iCycler iQ® (p.10) ● 4 iQ™5 (p.10) 	<ul style="list-style-type: none"> ● 3 Quantica® (p.10) ● 2 QuantStudio® (p.9) ● 3 qTower (p.10)
D	L	R
<ul style="list-style-type: none"> ● 3 DNA Engine Opticon® 1 & 2 (p.10) 	<ul style="list-style-type: none"> ● 3 LC96 & LC480 (p.10) ● 3 LightCycler® Nano System (p.10) 	<ul style="list-style-type: none"> ● 3 Rotor-Gene® 2000/3000/6000/Q (p.10)
	M	S
	<ul style="list-style-type: none"> ● 2* Mastercycler® ep realplex I & II (p.10) ● 3 MiniOpticon (p.10) ● 2&3 Mx3000P® (p.9&10) ● 2&3 Mx3005P® (p.9&10) ● 2&3 Mx4000® (p.9&10) ● 4 My iQ (p.10) 	<ul style="list-style-type: none"> ● 3 SmartCycler® 1 & 2 (p.10) ● 3 Swift Spectrum™ 96 (p.10)

Legend

- ROX
- Low ROX
- No ROX
- Use Fluorescein with SYBR® MMix or No ROX with Probe MMix

RT-qPCR kits

The Takyon™ One-Step MasterMixes contain the new EuroscriptII RT which delivers highly robust performance on classical mRNAs, small RNA and viral RNAs.

The new additive improves significantly the amplification perfor-

mance on difficult virus types as well as on FFPE samples.

The 5X highly concentrated format allows more flexibility in template volume use especially in the context of small volume reaction.

	Product name	1 pack	5 packs	10 packs	# RXNs per single kit ¹	Format	Full carryover (dUTP+UNG)	Corresponding sample
SYBR® Assays								
For Two-Step Assays combine any kit mentioned above to our reverse transcriptase core kit RT-RTCK-03								
For One-Step Assays combine any dTTP Takyon™ 2X MasterMix with the Takyon™ One-Step kit converter UF-RTAD-D0101 (for 150 RXN MMix) or UF-RTAD-D0701 (for 750 RXN MMix)								
Probe Assays								
● ROX	Takyon™ Dry One-Step RT Probe MasterMix ROX	UFD-RPRT-C0101			150	MasterMix Dry		
	Takyon™ One-Step ROX Probe 5X MasterMix dTTP	UF-RP5X-RT0501	UF-RP5X-RT0505	UF-RP5X-RT0510	1250	MasterMix 5x		UF-RP5X-RT0100
● LOW ROX	Takyon™ Dry One-Step RT Probe MasterMix Low ROX	UFD-LPRT-C0101			150	MasterMix Dry		
	Takyon™ One-Step Low ROX Probe 5X MasterMix dTTP	UF-LP5X-RT0501	UF-LP5X-RT0505	UF-LP5X-RT0510	1250	MasterMix 5x		UF-LP5X-RT0100
● NO ROX	Takyon™ Dry One-Step RT Probe MasterMix No ROX	UFD-NPRT-C0101			150	MasterMix Dry		
	Takyon™ One-Step No ROX Probe 5X MasterMix dTTP	UF-NP5X-RT0501	UF-NP5X-RT0505	UF-NP5X-RT0510	1250	MasterMix 5x		UF-LP5X-RT0100

¹ #RXNs is calculated for a final volume of 20 µL.

qPCR kits

	Product name	1 pack	5 packs	10 packs	# RXNs per single kit ¹	Format	Full carryover (dUTP+UNG)	Corresponding sample
SYBR® Assays								
● ROX	Takyon™ ROX SYBR® MasterMix 2X Blue dTTP 75 mL	UF-RSMT-B0701	UF-RSMT-B0705	UF-RSMT-B0710	750	MasterMix 2x	²	UF-RSMT-B0100
	Takyon™ ROX SYBR® 2X Core Kit Blue dTTP	UF-RSCT-B0201	UF-RSCT-B0205	UF-RSCT-B0200	1250	Core Kit	²	
● LOW ROX	Takyon™ Low ROX SYBR® 2X MasterMix blue dTTP	UF-LSMT-B0701	UF-LSMT-B0705	UF-LSMT-B0710	750	MasterMix 2x	²	
● NO ROX	Takyon™ No ROX SYBR® 2X MasterMix Blue dTTP 75 mL	UF-NSMT-B0701	UF-NSMT-B0705	UF-NSMT-B0710	750	MasterMix 2x	²	UF-NSMT-B0100
	Takyon™ No ROX SYBR® Core Kit blue dTTP	UF-NSCT-B0201	UF-NSCT-B0205	UF-NSCT-B0210	1250	Core Kit	²	
● FLUORESCIN	Takyon™ SYBR® 2X MasterMix blue dTTP with fluorescein	UF-FSMT-B0701	UF-FSMT-B0705	UF-FSMT-B0710	750	MasterMix 2x	²	
	Takyon™ No ROX SYBR® Core Kit blue dTTP ³	UF-NSCT-B0201	UF-NSCT-B0205	UF-NSCT-B0210	1250	Core Kit	²	
Probe Assays								
● ROX	Takyon™ Dry ROX Probe MasterMix dTTP	UFD-RPMT-C0101			150	MasterMix Dry		
	Takyon™ ROX Probe 2X MasterMix UNG 75 mL	UF-RPMU-C0701	UF-RPMU-C0705	UF-RPMU-C0710	750	MasterMix 2x	✓	UF-RPMU-C0100
	Takyon™ ROX Probe 2X MasterMix dTTP Blue 75 mL	UF-RPMT-B0701	UF-RPMT-B0705	UF-RPMT-B0710	750	MasterMix 2x	²	UF-RPMT-B0100
	Takyon™ ROX Probe 2X MasterMix dTTP 75 mL	UF-RPMT-C0701	UF-RPMT-C0705	UF-RPMT-C0710	750	MasterMix 2x	²	UF-RPMT-C0100
	Takyon™ ROX Probe 5X MasterMix dTTP 5 x 1 mL	UF-RP5X-C0501	UF-RP5X-C0505	UF-RP5X-C0510	1250	MasterMix 5x	²	UF-RP5X-C0100
	Takyon™ ROX Probe Core Kit dTTP	UF-RPCT-C0201	UF-RPCT-C0205	UF-RPCT-C0210	1250	Core Kit	²	
● LOW ROX	Takyon™ Dry Probe MasterMix dTTP Low ROX	UFD-LPMT-C0101			150	MasterMix Dry		
	Takyon™ Low ROX Probe 2X MasterMix UNG 7.5 mL	UF-LPMU-C0701	UF-LPMU-C0705	UF-LPMU-C0710	750	MasterMix 2x	✓	UF-LPMU-C0100
	Takyon™ Low ROX Probe 2X MasterMix dTTP Blue 75 mL	UF-LPMT-B0701	UF-LPMT-B0705	UF-LPMT-B0710	750	MasterMix 2x	²	UF-LPMT-B0100
	Takyon™ Low ROX Probe 2X MasterMix dTTP 75 mL	UF-LPMT-C0701	UF-LPMT-C0705	UF-LPMT-C0710	750	MasterMix 2X	²	UF-LPMT-C0100
	Takyon™ Low ROX Probe 5X MasterMix dTTP 5 x 1 mL	UF-LP5X-C0501	UF-LP5X-C0505	UF-LP5X-C0510	1250	MasterMix 5x	²	UF-LP5X-C0100
	Takyon™ Dry Probe MasterMix dTTP No ROX	UFD-NPMT-C0101			150	MasterMix Dry		
● NO ROX	Takyon™ No ROX Probe 2X MasterMix UNG 75 mL	UF-NPMU-C0701	UF-NPMU-C0705	UF-NPMU-C0710	750	MasterMix 2x	✓	UF-NPMU-C0100
	Takyon™ No ROX Probe 2X MasterMix dTTP BLUE 75 mL	UF-NPMT-B0701	UF-NPMT-B0705	UF-NPMT-B0710	750	MasterMix 2x	²	UF-NPMT-B0100
	Takyon™ No ROX Probe 2X MasterMix dTTP 75 mL	UF-NPMT-C0701	UF-NPMT-C0705	UF-NPMT-C0710	750	MasterMix 2x	²	UF-NPMT-C0100
	Takyon™ No ROX Probe 5X MasterMix dTTP 5 x 1 mL	UF-NP5X-C0501	UF-NP5X-C0505	UF-NP5X-C0510	1250	MasterMix 5x	²	UF-NP5X-C0100
	Takyon™ No ROX Probe 5X HTP MasterMix dTTP 5 x 1 mL	UF-NP5X-CG0501	UF-NP5X-CG0505	UF-NP5X-CG0510	1250	MasterMix 5x	²	UF-NP5X-CG0100
	Takyon™ No ROX Probe Core Kit dTTP	UF-NPCT-C0701	UF-NPCT-C0705	UF-NPCT-C0710	1250	Core Kit	²	
	Takyon™ No ROX Probe Core Kit dTTP blue	UF-NPCT-B0701	UF-NPCT-B0705	UF-NPCT-B0710	1250	Core Kit	²	

² Optional: when dUTP/UNG (RT-UTPUNG-020) additive is used. Component included in Core Kits.

³ Combine with fluorescein additive (RT-FLUO-ADD).

Note : Easily find the best suited kit for your qPCR platform and application. Use our qPCR selector: www.eurogentec.com/qpcr-selector.html



Additional options



REVERSE TRANSCRIPTION

When working with RNA samples, a reverse transcription is required prior the qPCR reaction. One-step Takyon™ kits containing reverse transcriptase are available for all cyclers. In addition, you can convert any dTTP qPCR Takyon™ kit into a:

One-step RT-qPCR kit: Use Takyon™ One-Step Kit converter with any dTTP Takyon™ 2X Master Mix to make reverse transcription and qPCR in the same tube.

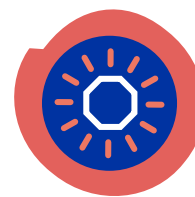
Two-step RT-qPCR kit: Use the Reverse Transcriptase Core Kit prior the qPCR assay to make a two steps reactions with any qPCR kit.



PREVENT CONTAMINATION

Using a mix containing dUTP and UNG brings security to the assay. Indeed any trace of DNA molecule from previous reaction containing dUTP will be removed by the action of the Uracyl-N-Glycosylase (UNG).

Takyon™ 2X Master Mixes for probe assays are available with dUTP/UNG already incorporated. Takyon™ core kits contain dUTP and UNG. Otherwise, dUTP/UNG additive can be used to convert any dTTP kit (e.g. SYBR® kit).



PASSIVE REFERENCE

Passive reference is required for well-to-well normalisation on some thermocyclers. Takyon™ kits with passive reference (ROX or fluorescein) already incorporated into the mix are available. ROX and Fluorescein additives are available as stand-alone reagents.



MISCELLANEOUS

ORDERING INFORMATION

Description	References	Quantity	Description	References	Quantity
Takyon™ One-Step Kit converter 20 µl	UF-RTAD-D0101 UF-RTAD-D0701 UF-RTAD-D0705 UF-RTAD-D0710	150 RXNs 750 RXNs 5x 750 RXNs 10x 750 RXNs	dUTP/UNG Additive for 5X MMx kit conversion	RT-UTPUNG-033	1250 rxn
Reverse Transcriptase Core Kit 300	RT-RTCK-03 05-RTCK-03 10-RTCK-03	300 RXNs 5x 300 RXNs 10x 300 RXNs	Fluorescein additive 1 mM (for My iQ / i-Cycler iQ ⁺ / iQ ⁵)	RT-FLUO-ADD	1 mL
Reverse Transcriptase Core Kit 500	RT-RTCK-05 05-RTCK-05 10-RTCK-05	500 RXNs 5x 500 RXNs 10x 500 RXNs	ROX Passive Reference	RT-PARE-03 05-PARE-03 10-PARE-03 RT-PARE-100	300 µl 5x 300 µl 10x 300 µl 10 mL
dUTP/UNG Additive for dTTP kit conversion	RT-UTPUNG-005	40 µL (150 RXNs)	UNG (Uracil-N-Glycosylase)	RT-0610-03	300 u
dUTP/UNG Additive for dTTP kit conversion	RT-UTPUNG-020 05-UTPUNG-020 10-UTPUNG-020	200 µL (750 RXNs) 5x 200 µL (5x 750 RXNs) 10x 200 µL (10x 750 RXNs)	UNG (Uracil-N-Glycosylase)	RT-0610-15	1500 u
			Takyon™ Blue Additive	UF-BLUE-ADD	3750 RXN

qPCR CONTROL ASSAYS

qPCR is the method of choice for quantitative gene expression studies. However qPCR assays are prone to inhibition by various substances found in many samples (clinical, soil, plant...).

Internal Positive Controls (IPC) allow you to detect inhibited amplification reactions

due to the carryover of reagents used for the isolation of nucleic acids. Other causes of false-negative results include target nucleic acid degradation, sample processing errors and thermocycler malfunction.

Housekeeping controls allow for gene expression studies. Reliable determination

of the gene expression level across samples requires efficient normalisation of the recorded signals. For that purpose Eurogentec has developed a limited set of optimised and validated housekeeping controls.

Housekeeping internal controls

The accurate and reliable determination of gene expression is commonly achieved by using well characterised internal genes as reference.

Accordingly, Eurogentec has functionally validated each of its controls. Each set has been optimised to a PCR efficiency of 95-100% when combined with a qPCR kit from Eurogentec.

The closer the level of target expression is to the expression of the internal control gene, the more accurate the determination

will be. Therefore the selected control gene should match your target gene expression depending on the cell type or tissue used. The table here below give you an idea of the expression levels of a selection of human housekeeping genes.

ALSO AVAILABLE

You can request your custom design for any other selected gene by sending the gene details to : scientific.support@eurogentec.com

FEATURES

- Validated for human samples
- Sensitive and specific detection
- Full expression range coverage
- Compatible with SYBR® green or probe assays

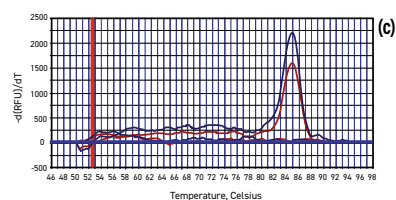
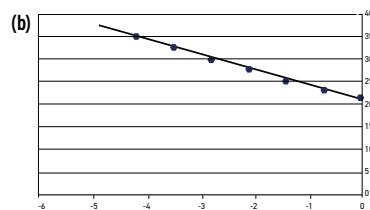
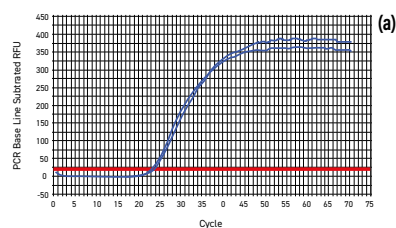


ORDERING INFORMATION

Human Gene	Relative expression level	cDNA	gDNA	Organism	Amplicon length	#RXN (50µL)	Reference
18S rRNA	Very high	✓	✓	H, Ra, M, Rb	121 bp	250	RT-CKFT-18S RT-CKYD-18S
28S rRNA	Very high	✓	✓	H, M	87 bp	250	RT-CKYD-28S
β-actin	High	✓	✓	H	91 bp	250	RT-CKYD-ACTB
GAPDH	High	✓		H	86 bp	250	RT-CKYD-GAPD
Ubiquitin C	High	✓	✓	H	76 bp	250	RT-CKYD-UBC
β-2-microglobulin	High	✓	✓	H	112 bp	250	RT-CKYD-B2M
Phospholipase A2	Medium	✓		H	93 bp	250	RT-CKYD-YWHAZ
RPL13a	Medium	✓	✓	H	92 bp	250	RT-CKYD-RPL13A
SDHA	Medium	✓		H	118 bp	250	RT-CKYD-SDHA
HMBS	Medium	✓		H	119 bp	250	RT-CKYD-HMBS
HPRT1	Low	✓		H	100 bp	250	RT-CKYD-HPRT1
TBP	Low	✓		H	145 bp	250	RT-CKYD-TBP

Relative expression levels of a selection of human housekeeping genes
H: Human Ra: Rat M: Mouse Rb: Rabbit

The selected control gene should match your target gene expression depending on the cell type or tissue used.



Amplification plot (a), standard curve (b) and melt curve (c) of human β-actin control.

Positive Controls

Eurogentec's Positive Controls (PC) are optimised Taqman® assays designed to distinguish true target negatives from false negatives.

The **Sample Processing Control (SPC)** is spiked into samples before extraction to monitor poor extraction yield, PCR

inhibition, incorrect pipetting or cycling parameters.

The **Internal Positive Control (IPC)** is spiked into samples before qPCR assay to confirm the absence of target sequence, inhibition or a reaction set-up/cycling error.

BENEFITS

Specific

Does not interfere with target amplification

Avoid amplification of endogenous genes

Sensitive

Compatible with low copy templates

Available with dark quencher for maximal signal-to-noise ratio

Designed for multiplex assays

Detected in the Yakima Yellow®/VIC®/JOE channel

Validated in duplex assays with the target in the FAM channel

Custom labelling is available on request



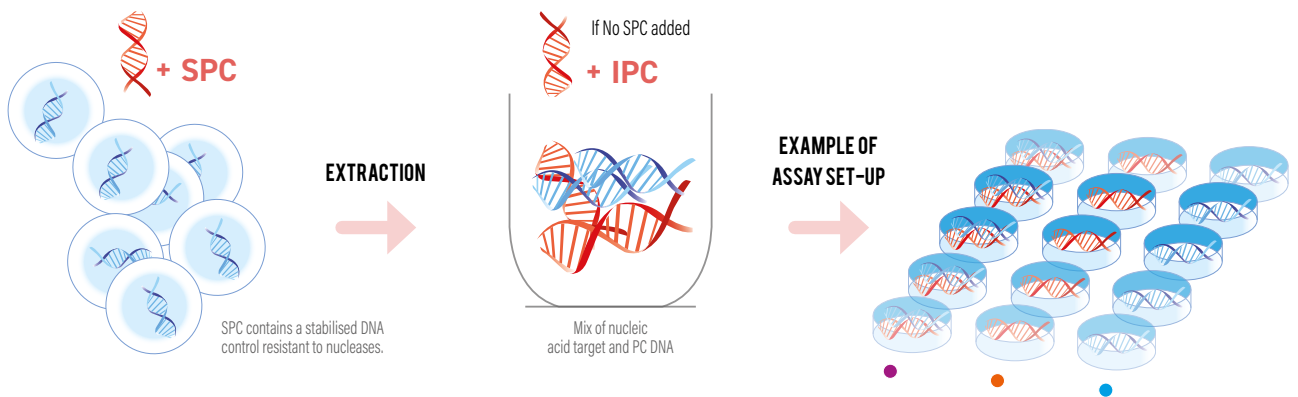
ORDERING INFORMATION

	Product	#RXN (50µL)	Reference
SPC	Sample Processing Control, YY-TAMRA	200	RT-SPCY-T02
	Sample Processing Control, YY-TAMRA	1000	RT-SPCY-T10
	Sample Processing Control, YY-BHQ-1*	200	RT-SPCY-B02
	Sample Processing Control, YY-BHQ-1*	1000	RT-SPCY-B12
IPC	Universal Exogenous qPCR Positive Control, YY-TAMRA	200	RT-IPCY-T02
	Universal Exogenous qPCR Positive Control, YY-TAMRA	1000	RT-IPCY-T10
	Universal Exogenous qPCR Positive Control, YY-BHQ-1*	200	RT-IPCY-B02
	Universal Exogenous qPCR Positive Control, YY-BHQ-1*	1000	RT-IPCY-B10

METHOD

2 controls (SPC or IPC), multiple possibilities

Eurogentec's Positive Controls (PC) are Optimised Taqman® Assays



APPLICATIONS

Distinguish true negative from false negative targets resulting from inhibition

Monitor loss or degradation of your DNA target during extraction

Assess the quality of your nucleic acids extracts

Calibrate interplate runs for data normalisation

Amplification		Results interpretation
Sample	PC	
+	+	Target Positive
-	+	Target Negative (no target sequence)
+	-	No conclusion on target presence*

*A negative target and PC (IPC or SPC) amplification suggests the presence of inhibitors, a wrong PCR set-up, a defective mix, an incorrect thermal cycling protocol or an extraction failure (in case of SPC use).

- qPCR Assay + Control: Sample + Primers + Probe (FAM) PC DNA + Primers + Probe (VIC*)
- No Template Control: No Sample + Primers + Probe (FAM) PC DNA + Primers + Probe (VIC*)
- No Positive Control: Sample + Primers + Probe (FAM) No PC DNA + Primers + Probe (VIC*)

PCR range

The wide variety of PCR applications requires occasional adjustments to the PCR process. Optimising PCR for your specific application can mean the difference between success and failure. Eurogentec offers you the choice between ready-to-use PCR mixes or separated reagents you can tailor to your need. ■

⇒ READY TO USE PCR MIXES

To gain time, prevent contamination risk by multiple pipettings and increase reproducibility of your PCR reactions, we recommend the use of a ready-to-use PCR Mix. **2 x concentrated PCR mixes** are convenient premixed solutions that include in a single tube all common reagents needed for PCR. Simply dilute twice the PCR mix with template, primers and water to start your reaction.

Four PCR mixes are available:

- **GoldStar® Mix** is composed of GoldStar® *Taq* polymerase, dNTPs, MgCl₂ and buffer

- **Red'y'Gold Mix** has the same composition than the GoldStar® Mix except that the loading buffer is **coloured with a red loading dye** allowing the direct loading of the amplicons on a gel.

- **HotGoldStar Mix** is the HotStart version of the GoldStar® Mix, containing a HotGoldStar *Taq* polymerase.

- **Red'y'Star Mix** has a composition similar to the HotGoldStar® Mix with a **buffer coloured with a red loading dye** allowing the direct loading of the amplicons on a gel.

BENEFITS

Easy-to-use

Optimised for a broad range of targets (< 3 Kb) and GC rich sequences

Highest sensitivity and yield

Achieves the highest quality sequencing data

ADDITIONAL INFORMATION

Package Content

5 x 1 mL of PCR Mix comprising of *Taq*® polymerase (1 u/25µl), dNTPs (400 µM), MgCl₂ (3 mM) and buffer

cGMP Mixes

Mixes prepared under ISO 13485 compliant processes (including enzymes of the Diamond *Taq*® family) are available on request at diagnostic. taq@eurogentec.com



ORDERING INFORMATION

Description	Quantity (units)	Product Numbers
GoldStar® Mix	5 x 1 mL	PK-0064-02
Red'y'Gold Mix	5 x 1 mL	PK-0064-02R
HotGoldStar Mix	5 x 1 mL	PK-0073-02
Red'y'Star Mix	5 x 1 mL	PK-0073-02R

PCR REAGENTS

dNTPS

dNTPs are available as convenient **100 mM sets** or in **ready-to-use mixes**. They offer reliable and reproducible performance in any enzymatic reaction, including PCR and reverse transcription.

dNTPs are enzymatically produced from **nucleotide monophosphates** by a process of phosphorylation. This process uses highly specific enzymatic systems, which eliminate impurities and PCR inhibitors such as modified nucleotides and

pyrophosphates. dNTPs are purified with preparative HPLC and are at least **99 % pure**. They are supplied **ready-to-use** as Lithium salts in water at pH 7.0.

Lithium salts have greater resistance to repeated freezing and thawing cycles than sodium salts dNTPs, and remain sterile over the entire shelf-life due to the bacteriostatic activity of lithium towards various microorganisms. ■



BENEFITS

> 99% Pure – free from PCR inhibitors, DNase, RNase and Nickase

Remain sterile over the entire shelf-life

High resistance to repeated freeze-thaw cycles



ORDERING INFORMATION

Description	Quantity	#Ref
dNTP Mix 1 x 20 μ moles	1 x 1 ml	NU-0010-10
dNTP Mix 5 x 20 μ moles	5 x 1 ml	NU-0010-50
dNTP Mix 10 x 20 μ moles	10 x 1 ml	NU-0010-100
dNTP Set 4 x 25 μ moles	4 x 250 μ l	NU-0020-50

PACKAGE CONTENT

dNTP mix contains all four nucleotides (dATP, dCTP, dGTP, dTTP) in a premixed solution, ready for immediate use (5 mM each).

dNTP set is delivered as a pack of four vials, each containing 100 mM of one of the four nucleotides (dATP, dCTP, dGTP, dTTP).

Polymerases

PCR yield and result consistency are mainly related to the reaction components quality and efficiency. High performance DNA polymerases are recommended to reduce background and to increase reproducibility. Accordingly, all our enzymes are tested extensively for the absence of nicking and priming activities, exonucleases and non-specific endonucleases.

Each polymerase has its own benefit. The choice of the polymerase usually depends on the template and the downstream application:

- **For low copy templates**, a high

specificity polymerase such as **SilverStar DNA polymerase** is recommended.

- **For *in vitro* diagnostic and demanding research applications**, ultra-pure polymerases are usually requested. Our **Diamond Tag®** polymerase family is GMP compliant and is perfectly suited for this kind of application.

- **For highest specificity**, choose a **HotStart** DNA polymerase. This will considerably increase the yield of the reaction.

To help you in your enzyme selection, please refer to the table on the next page.



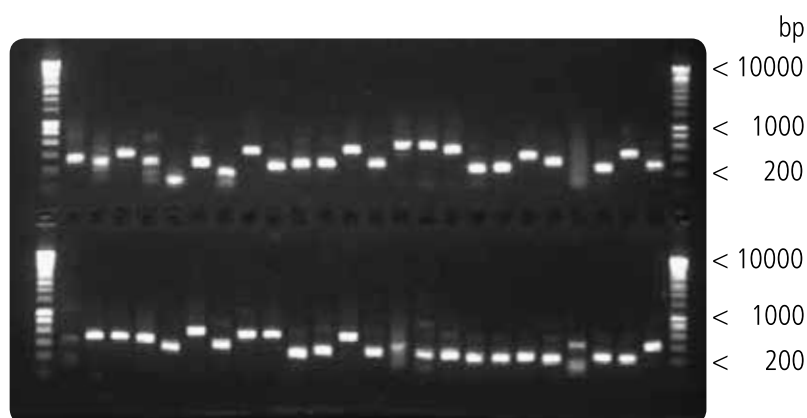
	Free Sample	PCR	qPCR	Yield	Sensitivity Low copy template	Fidelity	Specificity	Visual recognition	Difficult template (GC & AT rich)	Long template	3' end
Regular Polymerases											
Diamond <i>Taq</i> ®	TAQ-I021-100	***	*	++	++	++	++		*	**	3' A
Red Diamond <i>Taq</i> ®	TAQ-I041-100	***	*	++	++	++	++	✓	*	**	3' A
SilverStar	ME-0074-SA	***	*	+++	+++	+	+		*	**	3' A
Hotstart Polymerases											
Hot Diamond <i>Taq</i> ®	TAQ-I033-100	***	**	+++	+++	++	+++		***	***	3' A
HGS Diamond <i>Taq</i> ®	TAQ-I011-100	***	***	+++	+++	++	+++		**	**	3' A

* Weakly recommended ** Recommended *** Highly recommended + Low ++ Medium +++ High

SILVERSTAR DNA POLYMERASE

SilverStar is a high-performance thermostable recombinant DNA polymerase, isolated from *Thermus aquaticus*. It is an extremely **robust Taq DNA polymerase** that does not require optimisation and gives high yields with minimal background consistently from one reaction to another. It is a **highly active enzyme** that produces excellent results across a wide range of applications such as DNA Arrays.

The SilverStar has a 5'→3' exonuclease activity and also the extendase activity allowing TA cloning. The enzyme lacks the 3'→5' exonuclease activity.



In DNA Array application, 50,000 ORFs from more than 10 different organisms have been successfully amplified.

BENEFITS

- High yields
- Robust PCR (up to 5 kb)
- Highly purified *Taq* polymerase
- No optimisation needed

ADDITIONAL INFORMATION

Package Content

SilverStar DNA polymerase (5 U/μl)
10x reaction buffer
50 mM MgCl₂

Storage & Shipping conditions

Shipped and stored at -20°C

Quality

The enzyme is specifically purified to remove traces of DNA that could interfere with some reactions and is free from all non-specific endonucleases, nickases and exonucleases.



ORDERING INFORMATION

Description	Quantity (units)	Product Numbers
SilverStar DNA polymerase	500 U	ME-0074-05

DIAMOND *Taq*[®] FAMILY

Diamond *Taq*[®] family enzymes are **highly thermostable polymerases** produced and purified from recombinant *Escherichia coli* bacteria containing the *Thermus aquaticus* DNA polymerase gene.

Diamond *Taq*[®] enzymes have been manufactured under fully compliant **cGMP** conditions

to ensure lot-to-lot consistency and ultra-low bioburden. They are purified in class 10 000 clean-room (ISO 7 with <100 cfu/m³) and filled and finished in a class 100 laminar flow hood (ISO 5 with <1 cfu/m³). Final product is released by our Quality Assurance Department with a **formal Certificate of Analysis. Full batch**

records are maintained and can be reviewed during customer or regulatory audits.

The expressed enzyme shows very good fidelity and catalyses 5'→3' synthesis of DNA with no detectable 3'→5' exonuclease activity. The enzyme has the "extendase" activity allowing TA cloning.

Parameters	Specifications
Appearance ²	Clear, colourless solution ¹
Identity (SDS-PAGE)	MW approx. 95 kDa
Volume activity	5 U/μl
Purity (SDS-PAGE)	Over 98 %
Performance test: PCR -IDNA ²	0.5 kb fragment positive down to 5 pg
Performance test: PCR - 18 S DNA ²	0.1 kb fragment positive down to 10 pg
Ribonucleases (up to 10 U, 1 h, 37 °C)	Not detectable
Endonucleases (up to 30 U, 16 h, 65 °C)	Not detectable
Exonucleases (up to 30 U, 16 h, 65 °C)	Not detectable
Nicking activity (up to 30 U, 16 h, 65 °C)	Not detectable
<i>E. coli</i> residual DNA	Over 1 fg / <i>Taq</i> Unit
Bioburden ²	≤ 10 CFU/ml
Stability ²	36 months (at -20 °C) from date of manufacture
Animal-derived additives ²	None

¹Red Solution for Red Diamond *Taq*[®]

²Also for buffer & MgCl₂



ORDERING INFORMATION

Description	Quantity (units)	Product Numbers
Diamond <i>Taq</i> [®] DNA Polymerase	1000 U	TAQ-I021-1000
	5000 U	TAQ-I021-5000
	25000 U	TAQ-I021-25000-
Red Diamond <i>Taq</i> [®] DNA Polymerase	1000 U	TAQ-I041-1000
	5000 U	TAQ-I041-5000
	25000 U	TAQ-I041-25000-
HGS Diamond <i>Taq</i> [®] DNA Polymerase	1000 U	TAQ-I011-1000+
	5000 U	TAQ-I011-5000+
	25000 U	TAQ-I011-25000
Hot Diamond <i>Taq</i> [®] DNA Polymerase	1000 U	TAQ-I033-1000-
	5000 U	TAQ-I033-5000
	25000 U	TAQ-I033-25000-

BENEFITS

- Higher sensitivity
- Higher lot-to-lot consistency
- Ultra-low bioburden between 0 and 10 CFU/ml
- Ultra-low residual DNA content less than 1 fg (0.2 copy) of genomic *E. coli* DNA / *Taq* unit
- Lower risk of false positive results due to residual DNA contamination (bacterial & fungal)

ADDITIONAL SPECIFICATIONS

PARAMETERS

For HGS Diamond *Taq*[®]

HotStart activity
No detectable amplification without 95 °C activation

For Hot Diamond *Taq*[®]

Performance test PCR-Numb DNA 0.3 kb fragment positive down to 10 pg

ADDITIONAL INFORMATION

Package Content

- 5 U/μL enzyme
- 10X reaction buffer
- 25 mM MgCl₂ solution

Diamond *Taq*[®] DNA polymerases can be custom-produced on request with an activity from 5 to 5000 U/μL and a glycerol level from <1 to 50%.

Documentation

Enzymes are provided with specification sheet & Certificate of Analysis with the QC data released by a QC authorised person and based on review of the complete batch record.

Order & Shipping conditions

Enzymes are shipped at room temperature (except for Hot Diamond *Taq*[®], on dry ice) with full traceability from production to storage of the product.

Diamond *Taq*[®] DNA polymerases are also available under IVD grade. In that case the shipping is made on dry ice with a full traceability from the production to the shipment of the product. The tracking number is sent to the customer the day of the shipment.

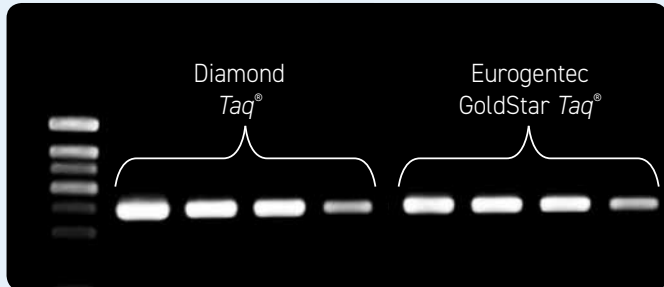
For more information about the IVD grade polymerases, please contact us at ivd-taq@eurogentec.com

Samples are available on request.

Regular Polymerases: Diamond *Taq*[®] and Red Diamond *Taq*[®]

For **demanding research applications**, **Diamond *Taq*[®] DNA polymerase** is recommended.

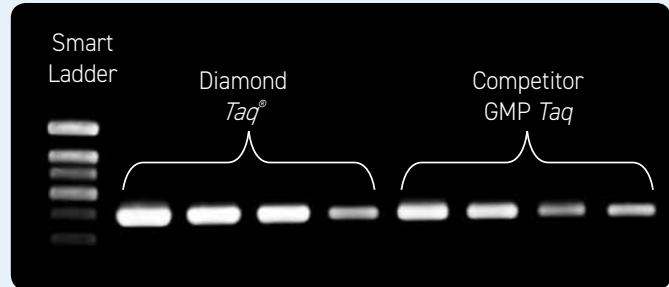
To ease visualisation, we recommend the **Red Diamond *Taq*[®] DNA polymerase**, similar to the Diamond *Taq*[®] DNA polymerase



Diamond *Taq*[®] and GoldStar[®] *Taq* have the same performance

Diamond *Taq*[®] was evaluated against Eurogentec's GoldStar *Taq*[®] for its ability to amplify different amounts (from 5 to 1000 pg) of a 0.5 kb PCR template (λ DNA). PCR products were analysed by gel electrophoresis.

except that the storage buffer contains an **inert red dye**. The red dye does not influence the PCR reaction and has no effect on automated or manual sequencing, restriction digestions or other downstream applications. Removing the dye can be easily accomplished using any standard purification method.

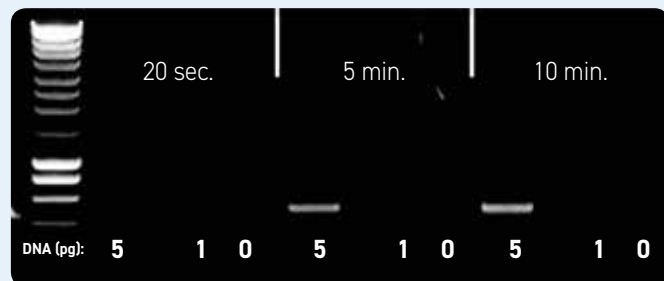


Diamond *Taq*[®] performance is similar or higher than competitor GMP *Taq*[®]

Diamond *Taq*[®] was evaluated against competitor GMP *Taq*[®] for its ability to amplify different amounts (from 5 to 1000 pg) of a 0.5 kb PCR template (λ DNA). PCR products were analysed by gel electrophoresis.

HotStart Polymerases: HGS Diamond *Taq*[®] and Hot Diamond *Taq*[®]

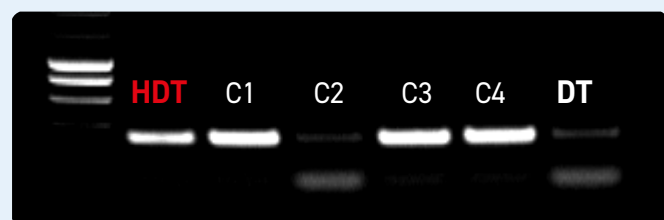
Initially lacking all activity below 74 °C **HGS Diamond *Taq*[®] DNA polymerase** is a **chemically modified HotStart** DNA polymerase. It requires a thermal activation of 10 minutes at 95 °C to reach maximal activity. This **avoids non-specific priming** at low temperature during the PCR set-up. HGS Diamond *Taq*[®]



HGS Diamond *Taq*[®] is a chemically modified HotStart enzyme.

HGS Diamond *Taq*[®] is a HotStart chemically modified enzyme that shows no amplification at room temperature but gives very high yield of specific product after a minimum of 10 minutes of enzyme activation at 95 °C.

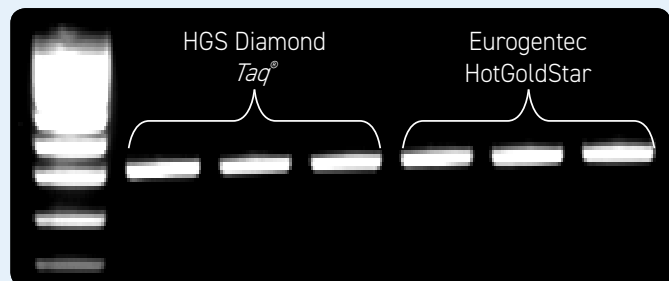
Preventing non-specific polymerisation, **Hot Diamond *Taq*[®] DNA polymerase** is a **HotStart enzyme** showing no amplification at room temperature and giving very high yield of specific product. HotStart characteristics are accomplished **through a proprietary agent, which is neither a chemical modification nor a blocking antibody**; this prevents primer-dimer formation and increases the



Performance test on a difficult template:

Hot Diamond *Taq*[®] (HDT) & Diamond *Taq*[®] (DT) were evaluated against HotStart competitors (C1, 2 & 4 - Chemical modification; C3 - Antibody) for their ability to amplify a difficult PCR template (gDNA NUMB - 306b). PCR products were analysed by gel electrophoresis.

is more heat-stable than commonly used *Taq*[®] DNA polymerase. DNA fragments as long as 2 kb can be efficiently amplified. HGS Diamond *Taq*[®] DNA polymerase provides efficient amplification of specific products without amplifying non-specific products or primer dimers.



HGS Diamond *Taq*[®] and HotGoldStar[®] *Taq* performances are similar.

HGS Diamond *Taq*[®] was evaluated against Eurogentec's HotGoldStar (HGS) for its ability to amplify in triplicate 5 pg of a 0.5 kb PCR template (λ DNA). PCR products were analysed by gel electrophoresis.

PCR yield of specific products. The enzyme needs a very short activation time (100 % activated during the first PCR cycle) and is compatible with all existing protocols (from 20 sec. to 15 min. at 95 °C). **Hot Diamond *Taq*[®] DNA polymerase is recommended for long & difficult template amplification.**



Performance test on a 72% GC rich template:

Hot Diamond *Taq*[®] (HDT) & Diamond *Taq*[®] (DT) were evaluated against HotStart competitors (C1, 2 & 4 - Chemical modification; C3 - Antibody) for their ability to amplify a GC rich PCR template (SC03449 - 152b). PCR products were analysed by gel electrophoresis.



Reverse transcriptase

MU-MLV REVERSE TRANSCRIPTASE

Mu-MLV is a reverse transcriptase purified from a recombinant overexpressing clone of *E. coli* that carries the reverse transcriptase gene

from Moloney Murine Leukemia Virus. The enzyme synthesises a complementary cDNA strand from a single stranded RNA or DNA

template. Mu-MLV lacks the 3'→5' exonuclease activity. It is recommended to use 10 U/μg RNA for optimum reverse transcription.



ORDERING INFORMATION

Description	Quantity (units)	Product Numbers
Mu-MLV reverse transcriptase	40000 U	ME-0125-400

BENEFITS

Lower RNase H activity than AMV (Avian Myeloblastosis Virus) reverse transcriptase
Suitable for long mRNAs templates (>5kb)

ADDITIONAL INFORMATION

Package Content

Mu-MLV reverse transcriptase (200 U/μl)
5x cDNA buffer: 250 mM Tris-HCl (pH 8.3), 375 mM KCl, 50 mM DTT, 15 mM MgCl₂

Storage & Shipping conditions

Shipped and Stored at -20°C

Quality

The enzyme is tested for the absence of endonucleases and RNases

Custom services

Each project is different and a unique qPCR solution suiting all requirements does not exist. Eurogentec affords the flexibility to adapt its offer to your specific needs.

⇒ CUSTOM FORMULATIONS

Because setting up a qPCR or a PCR assay can be a real challenge requiring an optimised Mix composition, Eurogentec offers you the possibility to produce your own Mix.

Combine the following advantages in a single product:

- Maximised sensitivity and specificity of your custom validated Mix
- Absolute reproducibility with the benefits of a unique dedicated batch
- Minimal contamination risks and pipetting errors with ready-to-use Mix
- Consignment and scheduled deliveries
- Various packaging (tube, plate, bottles...)
- Inclusion of external components (enzymes, oligonucleotides...)

Please contact us to develop your own formulation:

custom.qpcr@eurogentec.com



⇒ ASSAY DISPENSING SERVICE

In its constant search for simple, affordable and innovative solutions for the Life Science community, Eurogentec has developed a dispensing service that brings all advantages of automation within everyone's reach.

Ease your workflow by automating your routine assays to perfection, with full design and format flexibility. Combine all required reagents, in any type of formulation, support and packaging, to produce your Ready & Easy-to-Use solution, saving set-up time, minimising user input and skill level, as well as reagent wastage and hidden costs.

The process offers a very high reliability, reproducibility and accuracy. Our dispensing service is in line with ISO15189 quality standards and is fully scalable, taking care of the preparation of any type of routine assays to full kitting solutions.

⇒ KIT DESIGN AND MANUFACTURING

A unique offer allowing rapid RUO launch to full kit design and manufacturing, for reduced time-to-market.

We take in charge the preparation of your kits and provide them labelled with your own brand. We offer a flexible production with custom fill & finish release options to fit with your own product lines.

Contact for dispensing & kit design manufacturing: **dispensing@eurogentec.com**

Primers & Probes

⇒ PRIMERS & PROBES FOR qPCR ASSAYS

Primers

Primers are used to amplify DNA fragment by PCR/qPCR process. Primer sequences need to be chosen to uniquely select for a region of DNA, avoiding the possibility of mishybridisation to a similar unwanted sequence nearby as well as region harbouring highly stable secondary structures.

GOOD TO KNOW

For optimal results in multiplex assays or using SYBR® Green, we recommend RP-cartridge*Gold purification for your primer.

Probes

A probe is a nucleic acid fragment labelled with an internally quenched fluorophore whose fluorescence is restored when hybridised to its target sequence or when physically separated from the quencher due to nuclease activity. Eurogentec offers various probe types (Double Dye, Molecular Beacons, MGB...) with a wide range of fluorophore and quencher pairs covering all the qPCR channels. The use of probes increases the specificity of the assay and allows multiplexing. Please refer to the compatibility table p24. to select the dye adapted to your thermocycler.

MGB PROBES

Eurogentec provides high quality MGB probes perfectly suited for patient management** and available in IVD grade upon request. We provide a complete offer with more than 15 dyes covering all qPCR channels.

PROBES SPECIFICATIONS

Length: From 10 to 50 bases

Synthesis scale: 10 nmol • 40 nmol • 200 nmol
• 1000 nmol • 2.5 µmol • 5 µmol • 10 µmol*

Backbone: DNA, LNA®, 2'O-Me RNA and phosphodiester linkage

Modifications: 5': 6-FAM, HEX, Cy3®, TET, Cy5®, AP5, YY...
3': TAMRA, DABCYL, BHQ™, DDQ, MGB-EDQ,...

Purifications: RP-HPLC or Dual HPLC

Quality Control: MALDI-TOF MS and analytical HPLC

Format: Dried

Packaging: 2 mL tube

Documentation: Technical data sheet

Probe Design: Available on request

Shipping: At room temperature



* Double-Dye, Molecular Beacon or MGB Probe. Each primer must be 15-30 DNA bases, unmodified and RP-Cartridge purified. The synthesis scale of the primers must be in accordance with the probe quantity (refer to www.eurogentec.com for details). Offer Valid only for orders placed on the Eurogentec e-commerce platform EOS. General conditions of sale will be applied. ** Restriction of use in the following countries: FR, UK, DE, IT, JP, ES. In these countries MGB probes must only be used for patient management. Use is free of limitation in other countries. End users are covered under Eurogentec's conveyed license for patient management.

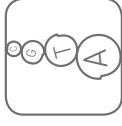


Eurogentec
Experience true partnership

DYES & QUENCHERS COMPATIBILITY TABLE

> Highly complex oligonucleotides

> Real-Time qPCR

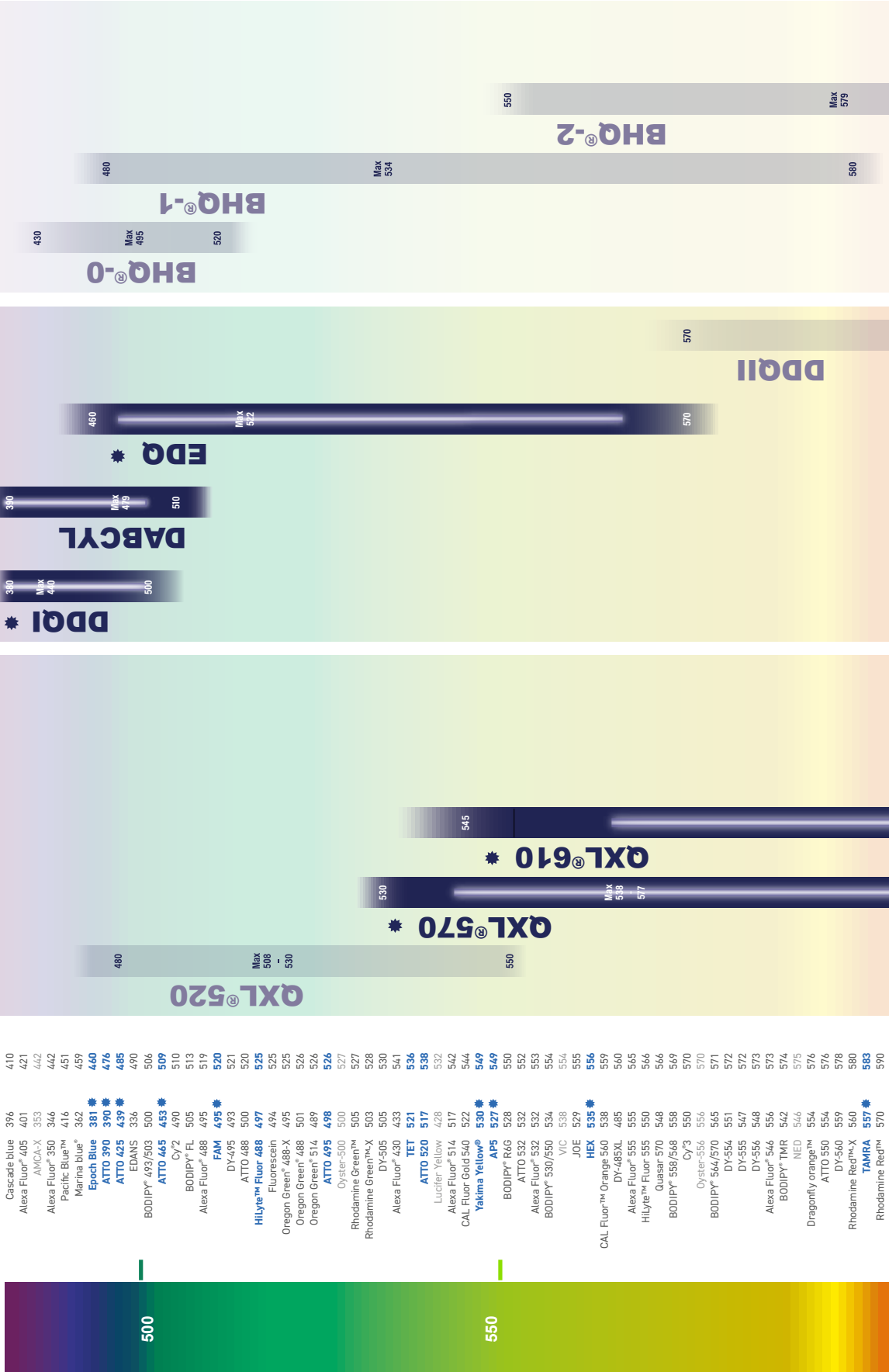


Oligos

FLUORESCENT DYES

Emission color
UV

Fluorescent Dyes	Max Abs in nm	Max Em in nm
Cascade blue	396	410
Alexa Fluor® 405	401	421
AMCA-X	353	442
Alexa Fluor® 350	346	442
Pacific Blue™	416	451
Marina Blue™	362	459
Epoch Blue	381	460
ATTO 390	390	476
ATTO 425	439	485
EDANS	336	490
BODIPY® 493/503	500	506
ATTO 465	455	509
Cy2	490	510
BODIPY® FL	505	513
Alexa Fluor® 488	495	519
FAM	495	520
DY-495	493	521
ATTO 488	500	520
HiLyte™ Fluor 488	497	525
Fluorescein	484	525
Oregon Green® 488-X	495	525
Oregon Green® 488	501	526
Oregon Green® 514	489	526
ATTO 495	498	526
Oyster-500	500	527
Rhodamine Green™	505	527
Rhodamine Green™-X	503	528
DY-505	505	530
Alexa Fluor® 430	433	541
TEI	521	536
ATTO 520	517	538
Lucifer Yellow	428	532
Alexa Fluor® 514	517	542
CAL Fluor-Gold 540	522	544
Yakima Yellow®	530	549
AP5	527	549
BODIPY® R66	528	550
ATTO 532	532	552
Alexa Fluor® 532	532	553
BODIPY® 530/550	534	554
VIC	538	554
JOE	529	555
HEX	535	556
CAL Fluor™ Orange 540	538	559
DY-485XL	485	560
Alexa Fluor® 555	555	565
HiLyte™ Fluor-555	550	566
Quasar-570	548	566
BODIPY® 558/568	558	569
Cy3	550	570
Oyster-556	556	570
BODIPY® 544/570	545	571
DY-554	551	572
DY-555	547	572
DY-556	548	573
BODIPY™ TMR	542	574
NED	546	575
Dragonfly orange™	554	576
ATTO 550	554	576
DY-540	559	578
Rhodamine Red™-X	560	580
TAMRA	537	583
Rhodamine Red™	570	590



ORDER

Oligonucleotides can be ordered via the web oligo configurator or on request at unique@eurogentec.com. For more information, please contact us at oligo@eurogentec.com

HIGH PERFORMANCE

Access™ Dyes and Quenchers from Eurogentec are a class of high performance proprietary molecules with IP-friendly terms and conditions. ■

SEE ALSO

Compatibility cycler channel vs fluorescent dyes page 28.

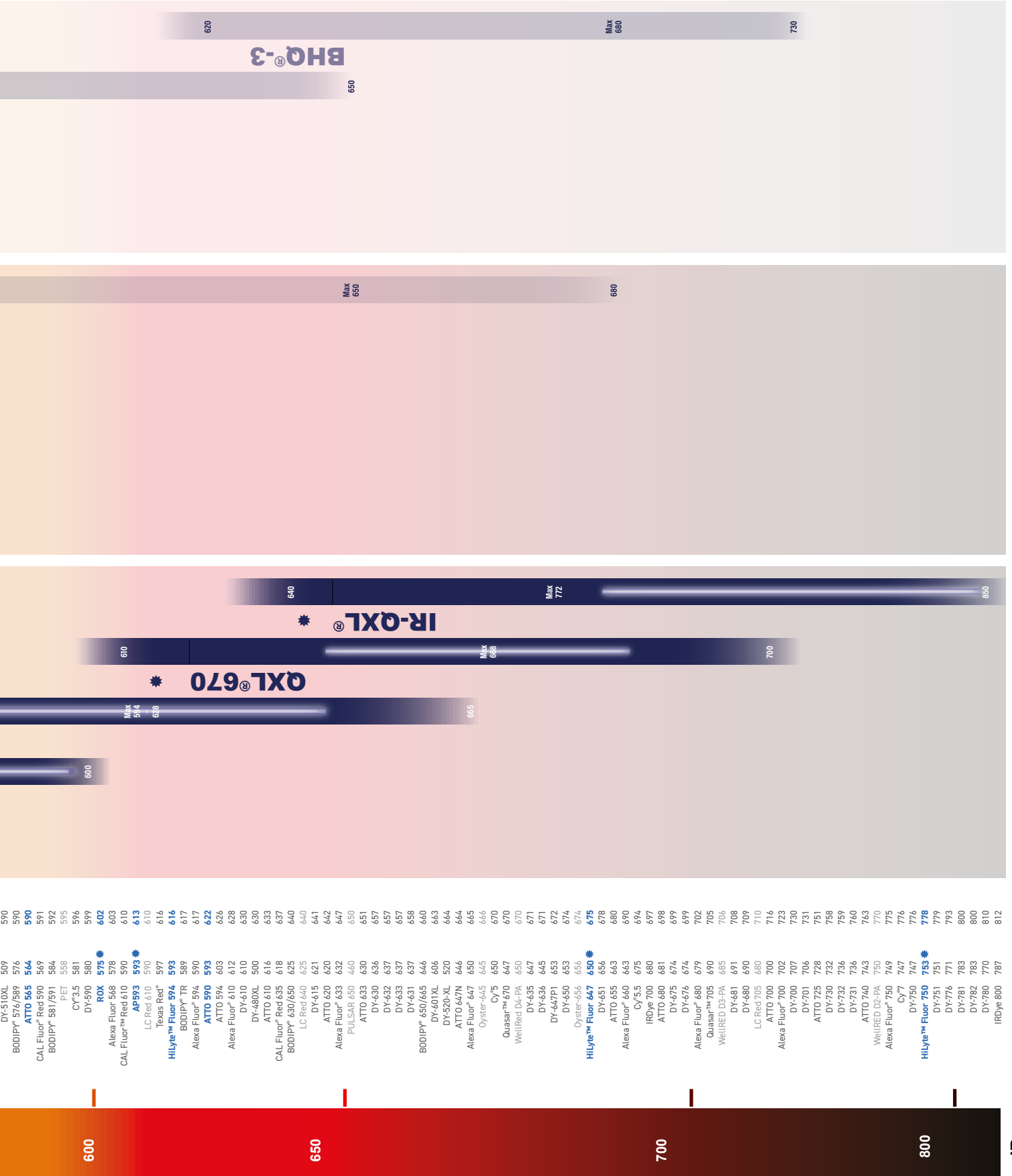
USAGE

In bold blue: Dyes & Quenchers for commercial & research use
In black: Dyes & Quenchers for research use only (RUO)
 In light grey: Not available at Eurogentec

- Dark blue bands represent the indicative quenching range of recommended quenchers.
- Gray bands represent the indicative quenching range of alternate quenchers.
- Purple bars represent the optimal recommended quenching range.
- ★ Access™ Dyes & Quenchers

All wavelength values are in nm.

Note: Spectral properties of a dye or a quencher may vary when coupled to another molecule



DY-510XL	509
BODIPY [®] 576/589	576
ATTO 565	564
CAL Fluor [™] Red 590	569
BODIPY [®] 581/591	584
PET	586
CY 3.5	581
CY 5	596
DY-590	580
ROX	575
Alexa Fluor [™] 568	578
CAL Fluor [™] Red 610	590
AP593	593
LC Red 610	590
Texas Red [®]	597
HiLyte™ Fluor 594	593
BODIPY [™] TR	589
Alexa Fluor [™] 594	590
ATTO 590	593
ATTO 594	603
Alexa Fluor [™] 610	612
DY-610	610
DY-680XL	600
ATTO 610	616
CAL Fluor [™] Red 635	618
BODIPY [™] 630/650	625
LC Red 640	625
DY-615	621
ATTO 620	620
Alexa Fluor [™] 633	632
PULSAR 650	640
ATTO 633	630
DY-630	636
DY-632	637
DY-633	637
DY-631	637
BODIPY [™] 650/665	646
DY-601XL	606
DY-620-XL	620
ATTO 647N	646
Alexa Fluor [™] 647	650
Oyster-645	645
CY5	650
Quasar [™] 670	647
WellRed D4-PA	650
DY-635	647
DY-636	645
DY-647PI	653
DY-660	653
Oyster-656	656
HiLyte™ Fluor 647	650
DY-651	656
ATTO 655	643
Alexa Fluor [™] 660	643
CY5.5	675
IRDye 700	680
ATTO 680	681
DY-675	674
DY-676	674
Alexa Fluor [™] 680	679
Quasar [™] 705	690
WellRED D3-PA	685
DY-681	691
DY-680	690
LC Red 705	680
ATTO 700	700
Alexa Fluor [™] 700	702
DY-700	707
DY-701	706
ATTO 725	728
DY-730	732
DY-732	736
DY-731	736
ATTO 740	743
WellRED D2-PA	750
Alexa Fluor [™] 750	749
CY7	747
DY-750	747
HiLyte™ Fluor 750	753
DY-751	751
DY-776	771
DY-781	783
DY-782	783
DY-780	770
IRDye 800	787

COMPATIBILITY CYCLER CHANNELS VS FLUORESCENT DYES

Thermocycler	Blue channel	Channel 1	Channel 2	Channel 3	Channel 4	Channel 5	Channel 6	Channel 7
GeneAmp SDS 5700	-	FAM	AP5/Y/Y/JOE/VIC/TET*	DF0*/TAMRA/NEED	-	-	-	-
ABI Prism SDS 7000	-	FAM	AP5/Y/Y/JOE/VIC/TET*	DF0*/TAMRA/NEED	ROX	-	-	-
ABI Prism SDS 7700	-	FAM	AP5/Y/Y/JOE/VIC/TET*	DF0*/TAMRA/NEED	ROX	-	-	-
ABI Prism SDS 7900 HT	-	FAM	AP5/Y/Y/JOE/VIC/TET*	DF0*/TAMRA/NEED	ROX	-	-	-
ABI Prism SDS 7300	-	FAM	AP5/Y/Y/JOE/VIC/TET*	DF0*/TAMRA/NEED	ROX	-	-	-
ABI Prism SDS 7900	-	FAM	AP5/Y/Y/JOE/VIC/TET*	DF0*/TAMRA/Cy 3/NEED	ROX/TR	Cy 5/HL647	-	-
QuantaStudio 3, 5, 6, 7	-	FAM	AP5/Y/Y/JOE/VIC/TET*	DF0*/TAMRA/Cy 3/NEED	ROX/TR	Cy 5/HL647	-	-
QuantaStudio 7	-	FAM	AP5/Y/Y/JOE/VIC/TET*	DF0*/TAMRA/Cy 3/NEED	ROX/TR	Cy 5/HL647	Cy 5.5/ATTO 700	-
Vii7	-	FAM	AP5/Y/Y/JOE/VIC/TET	DF0*/TAMRA/NEED	ROX/TR*	ATTO 663/IZ	ATTO 680/Alexa Fluor 680	-
StepOne	-	FAM	AP5/Y/Y/JOE/VIC/TET*	ROX	-	-	-	-
StepOnePlus	-	FAM	AP5/Y/Y/JOE/VIC/TET*	DF0*/TAMRA/Cy 3/NEED	ROX	-	-	-
CyclerIQ	-	FAM	AP5/Y/Y/HEX/ Cy 3/TET	DF0*/TAMRA/Cy 3/NEED	ROX/TR	Cy 5	-	-
MyiQ	-	FAM	-	-	-	-	-	-
iQ5	-	FAM	AP5/Y/Y/HEX/JOE/TET	DF0*/TAMRA/Cy 3/NEED	ROX/TR	Cy 5	-	-
CFX 96	-	FAM	AP5/Y/Y/HEX/JOE/TET	ROX / TR	Cy 5	Cy 5.5	-	-
MiniOpton	-	FAM	AP5/Y/Y/HEX/TET*	-	-	-	-	-
DNA Engine Opticon 1	-	FAM	-	-	-	-	-	-
DNA Engine Opticon 2	-	FAM	AP5/Y/Y/HEX/TAMRA/VIC/TET	-	-	-	-	-
Chromo 4	-	FAM	AP5/Y/Y/HEX/TAMRA/Cy 3/JOE/IC/TET	ROX/TR	Cy 5	-	-	-
MX300P (choice of 4 filters)	-	FAM	TET	YY*/HEX/JOE/VIC	Cy 3	DF0*/TAMRA/NEED	TR/ROX	Cy 5
MX300P* (choice of 5 filters)	-	FAM	TET	YY*/HEX/JOE/VIC	Cy 3	DF0*/TAMRA/NEED	TR/ROX	Cy 5
MX400 (choice of 4 filters)	-	FAM	TET	YY*/HEX/JOE/VIC	Cy 3	DF0*/TAMRA/NEED	TR/ROX	Cy 5
Amplix (choice of up to 6 filters)	-	FAM	HEX	Cy 3	ROX	Cy 5	-	-
Mastecycler ep realplex2	-	FAM	AP5/Y/Y/HEX/JOE/VIC/TET	-	-	-	-	-
Mastecycler ep realplex4	-	FAM	AP5/Y/Y/HEX/TET/JOE/VIC	DF0*/TAMRA	ROX	-	-	-
LightCycler 15	-	FAM	AP5/Y/Y/HEX/JOE/VIC/TET	Cy 5	-	-	-	-
LightCycler 2	-	FAM	AP5/HEX/YY*/JOE*/VIC	TR/LC Red 610	ATTO 620/LC Red 640	Cy 5/LC Red 670	ATTO 680 / LC Red 705	-
LightCycler 480 1	-	FAM	AP5/Y/Y/HEX/JOE*/VIC	ROX/TR/LC Red 610	ATTO 620/LC Red 640	Cy 5	-	-
LightCycler 480 II	-	FAM	AP5/Y/Y/HEX/JOE*/VIC	ROX/TR/LC Red 610	ATTO 620/LC Red 640	Cy 5/Cy 5.5	-	-
LightCycler 96	-	FAM	AP5/Y/Y/HEX/VIC	TR/LC Red 610	Cy 5	-	-	-
SmartCycler1	-	FAM	AP5/Y/Y/Cy 3/JOE/VIC/TET	TR	Cy 5	-	-	-
SmartCycler 2	-	FAM	AP5/Cy 3/YY*/JOE*/TET	TR/ROX	Cy 5	-	-	-
Rotor-Gene 2000 / 3000	-	FAM	AP5/Y/Y/JOE/IC/TET	TAMRA/ROX/Cy 3.5/TR	Cy 5	-	-	-
Rotor-Gene 6000	-	FAM	AP5/Y/Y/HEX/JOE/VIC/TET	TAMRA/ROX/Cy 3.5/TR	Cy 5	ATT 0680	-	-
PhorReal	-	FAM	AP5/HEX/YY	ROX/TR	Cy 5	-	-	-
Qtower	-	FAM	AP5/Y/Y/HEX/JOE/IC	DF0*/TAMRA/NEED	ROX /TR/Cy 3.5	Cy 5	Cy 5.5	-

* perform a dye calibration for optimal results YY = Yakima Yellow® DFO = Dragonfly Orange™ TR = Texas Red® In blue = Recommended by Eurogentec In grey = Not available at Eurogentec In black = Available at Eurogentec

qPCR plastics

FEATURES

No background fluorescence to increase the signal to noise ratio

Optimal heat transfer to increase the reaction yield

Extreme uniformity to avoid edge artefacts

High purity, DNA(se), RNA(se), pyrogen-free to avoid sample contamination and degradation

BENEFITS

More accurate and reproducible results

Increased signal intensity

Our virgin optical quality polypropylene blend is optimised for qPCR and causes no background fluorescence. The wall thickness has been designed for an optimal heat transfer and to minimise evaporation of the reaction mix.

The antistatic properties of our plastics reduce reagents adsorption on the tube walls, increase the reaction yield and allow the use of small reaction volumes. The plates are perfectly flat, thin-walled and rigid, and show extreme uniformity to avoid edge artefacts.

Natural, white or frosted plates are available. White plates significantly increase signal-to-noise ratio compared to the natural plates but it may be difficult to see through the content. The best compromise remains the frosted plates which allow a direct view of the content and a high signal-to-noise ratio.

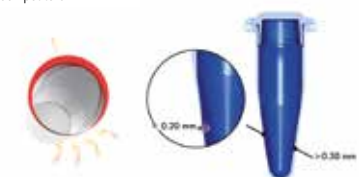
The super-tight closure and sealing properties reduce evaporation, leading to more reproducible results. The optical seals do not interfere with the signal, contrary to many other brands.

Please refer to the annexes to know which plastics is the most suited for your thermocycler. (pages 28 → 30) ■

Eurogentec



Competitors



Eurogentec's wells show an extreme uniformity of wall thickness avoiding edge artefacts. Moreover, the wall is thin at the bottom for an optimal heat transfer and thicker at the top to minimise evaporation. Red circles represent a top view of a well.

96-well plates

Our well plates are available for all thermocyclers and can be combined with either optical flat 8-caps strips as well as with qPCR optical seals. All non-skirted plates can be easily cut into 16, 24, 32 or 48-well pieces.

qPCR 96-well plates for ABI GeneAmp® 5700 SDS, ABI Prism® SDS 7000, 7300, 7500 Regular block, 7700, 7900 Regular block and ViiA™7 Regular block, Quanstudio regular (0,2 ml block)

- High profile
- Thin-walled
- Sub-skirted
- Optical quality
- Frosted or white



qPCR 96-well plates for iCycler iQ®, iQ5, MyiQ, Mx4000®, Mx3000P®, Mx3005P® and MasterCycler® ep realplex

- Also compatible with most regular 96-well ABI Real-Time thermocyclers
- High profile
- Thin-walled
- Non-skirted
- Natural or white
- Easy to cut into 16, 24, 32, 48-well pieces



Description	Reference	Quantity
qPCR 96-well plate sub-skirted, high profile, frosted (ABI systems)	RT-PL96-AB	5 x 5 plates
qPCR 96-well plate sub-skirted, high profile, frosted (ABI systems), 200 pack	RT-PL96-AB-P200	200 plates + seals
qPCR 96-well plate sub-skirted, high profile, frosted (ABI systems), 500 pack	RT-PL96-AB-P500	500 plates + seals
qPCR 96-well plate sub-skirted, high profile, white (ABI systems)	RT-PL96-ABW	5 x 5 plates
qPCR 96-well plate sub-skirted, high profile, white (ABI systems), 200 pack	RT-PL96-ABW-P200	200 plates + seals
qPCR 96-well plate sub-skirted, high profile, white (ABI systems), 500 pack	RT-PL96-ABW-P500	500 plates + seals

Description	Reference	Quantity
qPCR 96-well plate non-skirted, high profile, natural	RT-PL96-MQ	5 x 5 plates
qPCR 96-well plate non-skirted, high profile, natural, 200 pack	RT-PL96-MQ-P200	200 plates + seals
qPCR 96-well plate non-skirted, high profile, natural, 500 pack	RT-PL96-MQ-P500	500 plates + seals
qPCR 96-well plate non-skirted, high profile, white	RT-PL96-MQW	5 x 5 plates
qPCR 96-well plate non-skirted, high profile, white, 200 pack	RT-PL96-MQW-P200	200 plates + seals
qPCR 96-well plate non-skirted, high profile, white, 500 pack	RT-PL96-MQW-P500	500 plates + seals

qPCR 96-well plates for ABI Prism® SDS 7500 Fast block, 7900 Fast block, StepOne Plus and ViiA™7 Fast block, Quanstudio regular (0,1 ml block)

- Low profile
- Thin-walled
- Sub-skirted
- Optical quality
- Frosted or white



qPCR 96-well plates for DNA Engine Opticon® 1 and 2, MiniOpticon, Chromo4, StepOne and Quantica®, Biorad CFX 96

- Low profile
- Thin-walled
- Non-skirted
- Frosted or white
- Easy to cut into 16, 24, 32, 48-well pieces



Description	Reference	Quantity
qPCR 96-well plate sub-skirted, low profile, frosted (ABI FAST systems)	RT-PL96-AF	5 x 5 plates
qPCR 96-well plate sub-skirted, low profile, frosted (ABI FAST systems), 200 pack	RT-PL96-AF-P200	200 plates + seals
qPCR 96-well plate sub-skirted, low profile, frosted (ABI FAST systems), 500 pack	RT-PL96-AF-P500	500 plates + seals
qPCR 96-well plate sub-skirted, low profile, white (ABI FAST systems)	RT-PL96-AFW	5 x 5 plates
qPCR 96-well plate sub-skirted, low profile, white (ABI FAST systems), 200 pack	RT-PL96-AFW-P200	200 plates + seals
qPCR 96-well plate sub-skirted, low profile, white (ABI FAST systems), 500 pack	RT-PL96-AFW-P500	500 plates + seals

Description	Reference	Quantity
qPCR 96-well plate non-skirted, low profile, frosted	RT-PL96-OP	5 x 5 plates
qPCR 96-well plate non-skirted, low profile, frosted, 200 pack	RT-PL96-OP-P200	200 plates + seals
qPCR 96-well plate non-skirted, low profile, frosted, 500 pack	RT-PL96-OP-P500	500 plates + seals
qPCR 96-well plate non-skirted, low profile, white	RT-PL96-OPW	5 x 5 plates
qPCR 96-well plate non-skirted, low profile, white, 200 pack	RT-PL96-OPW-P200	200 plates + seals
qPCR 96-well plate non-skirted, low profile, white, 500 pack	RT-PL96-OPW-P500	500 plates + seals

qPCR 96-well plates for LC480

- Developed for LC480, no adaptor needed.
- Low profile
- Thin-walled
- Semi-skirted
- White



Description	Reference	Quantity
qPCR 96-well plate for LC480, low profile, thin-walled, semi-skirted, white	RT-PL96-LC480	5 x 5 plates
qPCR 96-well plate for LC480, low profile, thin-walled, semi-skirted, white, 200 pack	RT-PL96-LC480-P200	200 plates + seals
qPCR 96-well plate for LC480, low profile, thin-walled, semi-skirted, white, 500 pack	RT-PL96-LC480-P500	500 plates + seals

It is necessary to use our qPCR optical caps (flat 8-cap strips) or seals, to seal our plates

Discontinued: the previous model RT-PL96-LC which must be combined with the adaptor has been discontinued.

qPCR optical caps & seals

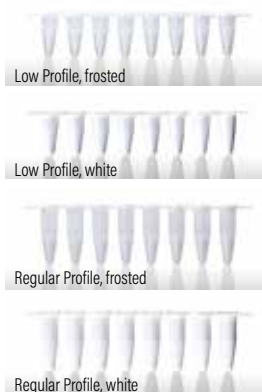
The extremely clear glass-grade area of the cap ensures very good transmission of the fluorescence and equals the performance properties of optical seals. When combined with our qPCR plates they seal better than other brands, thus less evaporation.

Our adhesive optical seals have excellent optical quality properties and will not interfere with the signal, leading to higher signal-to-noise ratio compared to other brands. The glue that we use has been specifically developed for the type of plastics that we use, thus it sticks to the plate very well and leads to better sealing and less evaporation. The seal itself is thicker than usual films, which avoids potential tears; moreover it will not curl and stick to itself.



Description	Reference	Quantity
qPCR optical semi-dome 8-cap strip, natural	RT-OCAP-300	300 strips
qPCR optical "wide indented" flat 8-cap strip, natural	RT-FLAT-120, RT-FLAT-300	120 strips or 300 strips
qPCR opti-seals (optical, disposable, adhesive)	RT-OPSL-25, RT-OPSL-100	25 or 100

qPCR 8-tube strips



These tube-strips are designed for PCR and qPCR applications. For the highest S/N ratios in qPCR the use of white or frosted products is recommended. qPCR 8-tube strips are compatible with almost all PCR and qPCR cyclers models which accept regular or low profile products. Please refer to the compatibility table to select the 8-tube strip adapted to your thermocycler (p.28).

Description	Reference	Quantity
0.1 mL Low Profile		
qPCR 8-tube strip, frosted	RT-STR8-LF120	1 bag of 120 strips
qPCR 8-tube strip, frosted + flat caps	RT-STR8-LF-P600	600x strips + 600 caps
qPCR 8-tube strip, white	RT-STR8-LW120	1 bag of 120 strips
qPCR 8-tube strip, white + flat caps	RT-STR8-LW-P600	600x strips + 600 caps
0.2 mL Regular Profile		
qPCR 8-tube strip, frosted	RT-STR8-RF120	1 bag of 120 strips
qPCR 8-tube strip, frosted + flat caps	RT-STR8-RF-P600	600x strips + 600 caps
qPCR 8-tube strip, white	RT-STR8-RW120	1 bag of 120 strips
qPCR 8-tube strip, white+ flat caps	RT-STR8-RW-P600	600x strips + 600 caps
LC480 96-well plate adaptor*	RT-PL96-LCAD	1 piece

*This adaptor is mandatory for use in LC480

384-well plates

For Roche, ABI, Bio-Rad & other systems

Our skirted 384-well plate types perfectly fit to Roche, ABI, Bio-Rad and Eppendorf qPCR platforms, as well as many regular PCR cyclers. The plates are fully optimised for robotic applications used for high-throughput, low volume processing. The plates are perfectly suited for diagnostic & clinical procedures. Each plate is lasermarkcoded with a unique code.

- Perfect fit to Roche, ABI, Bio Rad and Eppendorf systems
- Fully skirted, low profile, white plate
- Low evaporation, very robust, due to clever design
- Extreme Uniform wells lead to reproducible results
- Robotic friendly, easily stackable and flat
- High S/N Ratio



Description	Reference	Quantity
For Roche LC480	RT-PL384-LCW	8 x 5 plates
For ABI, Bio-Rad & Eppendorf systems	RT-PL384-ABW	8 x 5 plates

Plastics Samples

Reference	Product name	Quantity
qPCR 96-well plate type		
RT-PL96-ABSA	qPCR 96-well plate sub-skirted, high profile, frosted (ABI systems) sample	2
RT-PL96-ABWSA	qPCR 96-well plate sub-skirted, high profile, white (ABI systems) sample	2
RT-PL96-AFSA	qPCR 96-well plate sub-skirted, low profile, frosted (ABI FAST systems) sample	2
RT-PL96-AFWSA	qPCR 96-well plate sub-skirted, low profile, white (ABI FAST systems) sample	2
RT-PL96-MQSA	qPCR 96-well plate non-skirted, high profile, natural sample	2
RT-PL96-MQWSA	qPCR 96-well plate non-skirted, high profile, white sample	2
RT-PL96-OPSA	qPCR 96-well plate non-skirted, low profile, frosted sample	2
RT-PL96-OPWSA	qPCR 96-well plate non-skirted, low profile, white sample	2
RT-PL96-LC480SA	qPCR 96-well plate semi-skirted, low profile, white + seals for LC480 sample	2
qPCR 384-well plate type		
RT-PL384-LCWSA	qPCR 384-well white plate, skirted, low profile for LC480 sample	2
RT-PL384-ABWSA	qPCR 384-well white plate, skirted, low profile sample	2
qPCR 8-tube Strips		
RT-STR8-RFSA	qPCR 8-tube strip, regular profile - 0.2 mL -frosted sample	6
RT-STR8-RWSA	qPCR 8-tube strip, regular profile - 0.2 mL -white sample	6
RT-STR8-LFSA	qPCR 8-tube strip, low profile - 0.1 mL -frosted sample	6
RT-STR8-LWSA	qPCR 8-tube strip, low profile - 0.1 mL -white sample	6
Covers		
RT-FLAT-SA	qPCR optical flat 8-cap strip, natural sample	6
RT-OCAP-SA	qPCR optical semi-domed 8-cap strip, natural sample	24
RT-OPSL-SA	qPCR optical seals (disposable, adhesive) sample	2

96-WELL PLATE COMPATIBILITY WITH REAL-TIME THERMOCYCLERS

		ABI GeneAmp 5700	ABI Prism [®] SDS 7000-7300-7500-7700	ABI Prism [®] SDS 7500 FAST	ABI Prism [®] SDS 7900HT	ABI Prism [®] SDS 7900HT FAST	ABI Step One [™]	ABI Step One [™] Plus	ABI ViiA7 [™] qPCR system	ABI ViiA7 [™] FAST	ABI QuantStudio [™] 6-7-12k Flex	ABI QuantStudio [™] 6-7-12k Flex FAST	Bio-Rad MyiQ [™] -iQ-1Q5	Analytik Jena/Biometra Topical-qflower	Agilent/Stratagene Mx3000P -Mx3005P -Mx4000	Eppendorf Mastercycler ep realplex Silver	Bio-Rad DNA Engine (Dyad-Tetrad 2) Chromo4 [®]	Bio-Rad DNA Engine Opticon 2	MiniOpticon [™]	Bio-Rad CFX 96	Bio-Rad CFX 384	Roche LightCycler [®] 480	Roche COBAS z 480	Roche LightCycler [®] 96	Thermo Fisher/Fimzymes PikoReal 24-well	
qPCR 96-well plate type	Cover																									
Sub-skirted, high profile, frosted or white type (ABI systems) RT-PL96-AB or RT-PL96-ABW	Flat caps RT-FLAT-120	V	V		V				V	V			C	V	C	C										
	Adhesive seals RT-OPSL-100	V	V		V				V	V			C	V	C	C										
Sub-skirted, low profile, frosted or white type (ABI systems) RT-PL96-AF or RT-PL96-AFW	Adhesive seals RT-OPSL-100			V		V		V		V	V						C	C								
	Flat caps RT-FLAT-120	C	C						C		C		V	V	V	V			⊗							
Non-skirted, high profile, natural or white type RT-PL96-MQ or RT-PL96-MQW	Adhesive seals RT-OPSL-100	C	C						C		C		V	V	V	V			⊗							
	Flat caps RT-FLAT-120			C		C	⊗	C				C						V	V		V					
Non-skirted, low profile, frosted or white type RT-PL96-OP or RT-PL96-OPW	Adhesive seals RT-OPSL-100			C		C	⊗	C				C					V	V		V						
	Flat caps RT-FLAT-120																						V	V	V	
Semi-skirted, low profile, white RT-PL96-LC480	Adhesive seals RT-OPSL-100																					V	V	V		
	Flat caps RT-FLAT-120																						V	V	V	
qPCR 384-well plate type	Cover																									
Skirted, low profile, white plate for ABI RT-PL384-ABW	Adhesive seals RT-OPSL-100				V	V			V	V											V					
	Adhesive seals RT-OPSL-100																				V	V				
qPCR 8-tube Strips	Cover	Refers to cycler manufacturer instructions for required adaptor																								
Extra Robust, Regular Profile, Frosted, 0.2 ml RT-STR8-RF120	Flat caps RT-FLAT-120	C	C		C				C	C			C	C	C	C			C							
	Flat caps RT-FLAT-120	C	C		C				C	C			C	C	C	C			C							
Extra Robust, Low Profile, Frosted, 0.1 ml RT-STR8-LF120	Flat caps RT-FLAT-120			C		C	C	C		C	C						C	C		C			C**	C	V	
	Flat caps RT-FLAT-120			C		C	C	C		C	C						C	C		C			C**	C**	C	V

V for preferentially used plastics. Bolded C for compatible plastics. qPCR optical semi-dome 8 cap strips are also available (RT-OCAP-300: 300 strips). They can be used on several machines.

⊗ plate must be cut to size (48 well) to fit Step One[™] or MiniOpticon[™]. ** adaptor needed (Ref: RT-PL96-LCAD).

⊠ Please refer to cycler manufacturer instruction for required adaptor or contact us at scientific.support@eurogentec.com

PCR PLATE COMPATIBILITY TABLE (PART 1/2)

Manufacturer	Model	# Wells	Sub-skirted, high profile, frosted	Sub-skirted, low profile, frosted	Non-skirted, high profile, natural	Non-skirted, low profile, frosted	Skirted, low profile, white
			RT-PL96-AB	RT-PL96-AF	RT-PL96-MQ	RT-PL96-OP	RT-PL384-LCW
ABI	GeneAmp [®] PCR System 2400	24	x	x	≠	x	x
ABI	GeneAmp [®] PCR System 9600	96	V	x	C	x	x
ABI	2700 Thermal Cycler	96	V	x	C	x	x
ABI	2720 Thermal Cycler	96	V	x	C	x	x
ABI	GeneAmp [®] PCR System 9700	96/384	C	x	C	x	C
ABI	9800 Fast Thermal Cycler	96 fast	x	V	x	C	x
ABI	Verity	96/384	C	x	C	x	C
Bioer	XP Cycler	30/48/96/384	x	x	C	C	x
Bioer	Little Genius	25	x	x	≠	≠	x
Bioer	Life Express	96	x	x	C	C	x
Biometra	Uno	24/48/96	x	x	V	C	x
Biometra	Uno II	24/48/96/384	x	x	V	C	x
Biometra	Tpersonal	20/48	x	x	≠	≠	x
Biometra	T1 (plus)	48/96/384	x	x	V	C	C
Biometra	TGradient	48/96/384	x	x	V	C	x
Biometra	T3/T3000	20/48	x	x	≠	≠	x
Biometra	TProfessional	96/384	x	x	V	C	C
Biometra	TRobot	96/384	x	x	V	C	C
Bio-Rad	Gene Cycler	24	x	x	≠	x	x
Bio-Rad	iCycler [®]	48/96/384	x	x	C	x	C
Bio-Rad	MyCycler	96	x	x	C	x	x
Bio-Rad	C1000	96/384	x	x	C	x	C
CLP	ATC 201	96	x	x	C	C	x
CLP	ATC 401	96	x	x	C	C	x
Corbett Research	Palm-Cycler [®]	60/96/384	x	x	C	C	C
Eppendorf	MasterCycler [®]	96/384	x	x	C	C	C
Eppendorf	MasterCycler [®] gradient	96/384	x	x	C	C	C
Eppendorf	MasterCycler [®] ep gradient	96/384	x	x	C	C	C
Eppendorf	MasterCycler [®] ep gradient S	96/384	x	x	C	C	C
GRI	G-storm GSI	48 0.2ml/0.5ml	x	x	C	C	x
GRI	G-storm GSI	96/384	x	x	≠	≠	x
GRI	G-storm GSX	48 0.2ml/0.5ml	x	x	C	C	x
GRI	G-storm GSX	96/384	x	x	≠	≠	x
GRI	G-storm GS4	48 0.2ml/0.5ml	x	x	C	C	x
GRI	G-storm GS4	96/384	x	x	≠	≠	x
MJ Research/Bio-Rad	Mini	48	x	x	≠	≠	x
MJ Research/Bio-Rad	PTC-100	60/96	x	x	C	C	x
MJ Research/Bio-Rad	PTC-200	30/48/96/384	x	x	C	C	C

C Fits this Cycler
V Most optimal plastic for this thermocycler
≠ The plate must be cut
x Not compatible

PCR PLATE COMPATIBILITY TABLE (PART 2/2)

Manufacturer	Model	# Wells	Sub-skirted, high profile, frosted	Sub-skirted, low profile, frosted	Non-skirted, high profile, natural	Non-skirted, low profile, frosted	Skirted, low profile, white
			RT-PL96-AB	RT-PL96-AF	RT-PL96-MQ	RT-PL96-OP	RT-PL384-LCW
MJ Research/Bio-Rad	PTC-221	30/48/96/384	x	x	C	C	C
MJ Research/Bio-Rad	PTC-220	30/48/96/384	x	x	C	C	C
MJ Research/Bio-Rad	PTC-225	30/48/96/384	x	x	C	C	C
MWG	Primus 96	96	x	x	C	C	x
MWG	Primus HT Dualblock	96/384	x	x	C	C	C
MWG	Primus Multiblock System	96/384	x	x	C	C	C
Stratagene	Robo-Cycler	96	x	x	C	C	x
Takara	TP 600	96	x	x	C	C	x
Takara	TP 650	96	x	x	C	C	x
Takara	TP 3000	96	x	x	C	C	x
Techne	Genius	40/96/384	x	x	C	C	C
Techne	TouchGene	40/96	x	x	C	C	x
Techne	FlexiGene/FlexiQuad	96/384	x	x	C	C	C
Techne	TechGene	25/96	x	x	C	C	x
Techne	Gene-E	96	x	x	C	C	x
Techne	TC-412	96	x	x	C	C	x
Techne	TC-512	96/384	x	x	C	C	C
ThermoHybaid	PxE	96	x	x	C	C	x
ThermoHybaid	OmniGene	96	x	x	C	C	x
ThermoHybaid	PCR Express	48/96/384	x	x	C	C	C
ThermoHybaid	Omn-E	96	x	x	C	C	x
ThermoHybaid	TouchDown	48/96	x	x	C	C	x
ThermoHybaid	Px2	96/384	x	x	C	C	C
ThermoHybaid	PCR sprint	24	x	x	✂	✂	x
ThermoHybaid	MBS	96/384	x	x	C	C	C
ThermoHybaid	MBSR	96/384	x	x	C	C	C

SEQUENCER COMPATIBILITY

Manufacturer	Model	Sub-skirted, high profile, frosted	Sub-skirted, low profile, frosted	Non-skirted, high profile, natural	Non-skirted, low profile, frosted
		RT-PL96-AB	RT-PL96-AF	RT-PL96-MQ	RT-PL96-OP
ABI	310	x	x	C	x
ABI	3100	x	x	C	x
ABI	3130	x	x	C	x
ABI	3700	C	x	C	x
ABI	3730	C	x	C	x
Beckman	CEQ 8000	C	x	x	x
Beckman	CEQ 8800	C	x	x	x
Transgenomics	Wave MD System 4000	x	x	C	x

Models not mentioned within this list are not compatible with our plates.

Any type of cap/seal can be combined with these machines. Semi-domed caps are recommended for ABI machines.

C Fits this Cycler

V Most optimal plastic for this thermocycler

✂ The plate must be cut

x Not compatible

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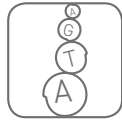


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