

EUROPE

LIEGE SCIENCE PARK • 4102 Seraing • Belgium • Tel.: +32 4 372 74 00
Fax: +32 4 372 75 00 • info@eurogentec.com • www.eurogentec.com

NORTH AMERICA

ANASPEC - 34801 Campus Drive • Fremont, CA 94555 • USA
Tel.: 510-791-9560 • toll-free: 800-452-5530 • Fax: 510-791-9572
info.anaspec@eurogentec.com • www.eurogentec.com

HotGoldStar Mix PK-0073-02 • PK-0073-02SA

Eurogentec products are sold for research or laboratory use only and are not to be administrated to humans or used for medical diagnostics.

Description

The ready to use 2x HotGoldStar Mix contains HotGoldStar *Taq* DNA polymerase, dNTPs, MgCl₂ and buffer. To prepare amplification, only add your primers, template DNA and water to the Mix.

Without activation, HotGoldStar *Taq* DNA polymerase completely lacks any activity below 74°C ("HotStart" activity avoids non specific priming at low temperature.)

Package contents

Reagent	Volume	Description
HotGoldStar Mix PK-0073-02 PK-0073-02SA	5 x 1ml 1ml	2 X PCR Mix: HotGoldstar, dNTPs, MgCl ₂ , buffer
MgCl ₂ 25 mM	1 ml	Additional 25 mM MgCl ₂ for optimization if needed (see table behind)

Shipping conditions

Shipped on dry ice.

Storage conditions and stability

HotGoldStar Mix can be stored at -20 °C (in a constant temperature freezer) for 24 months or at 4°C for 3 months. Do not repeat more than 10 freeze/thaw cycles.

Quality control

Each lot is tested for activity by PCR. Using λ DNA as template we guarantee an amplification of at least 10⁵ fold.

Unit Definition

One unit of enzyme is defined as the amount required for incorporation of 10 nmoles of dNTPs into acid - insoluble material after 30 minutes amplification at 72 °C under the standard reaction conditions.

Reaction conditions

25 µl of the 2x HotGoldStar Mix diluted to a final volume of 50 µl will give a reaction medium that contains 1 units of HotGoldStar DNA polymerase, 200 µM dNTPs, 1.5 mM MgCl₂, 50 mM KCl, 15 mM Tris-HCl (pH 8.0 at 25 °C), 0.01% (v/v) stabilizer.

Procedure

1. Thaw vial, mix and place on ice.
2. To 25 µl of HotGoldStar Mix, add 0.1 nmol of primers, <1µg of template DNA and H₂O to bring the total reaction volume to 50 µl.

Standard cycling conditions

<i>HotGoldStar Activation</i>	10 min at 95 °C
35 cycles:	
<i>Denaturation</i>	20 sec at 94 °C
<i>Annealing</i>	20 sec at 62 °C
<i>suggested Elongation</i>	30 sec at 72 °C

Time and temperature for denaturation and annealing steps depend on the type of machine and primers. We advise that you check primer design using primer design software.

No amplification will be observed without activation.

EUROPE

LIEGE SCIENCE PARK • 4102 Seraing • Belgium • Tel.: +32 4 372 74 00
Fax: +32 4 372 75 00 • info@eurogentec.com • www.eurogentec.com

NORTH AMERICA

ANASPEC - 34801 Campus Drive • Fremont, CA 94555 • USA
Tel.: 510-791-9560 • toll-free: 800-452-5530 • Fax: 510-791-9572
info.anaspec@eurogentec.com • www.eurogentec.com



Eurogentec

Experience true partnership

MgCl₂ optimization

MgCl ₂ final concentration	2× PCR Mix	MgCl ₂ (25 mM)	Primers, template, H ₂ O
1.5 mM	25 µl	0 µl	25 µl
2.0 mM	25 µl	1 µl	24 µl
2.5 mM	25 µl	2 µl	23 µl
3.0 mM	25 µl	3 µl	22 µl
3.5 mM	25 µl	4 µl	21 µl
4.0 mM	25 µl	5 µl	20 µl
4.5 mM	25 µl	6 µl	19 µl
5.0 mM	25 µl	7 µl	18 µl

Related products

Reagent	Pack size	Reference
dNTP Mix 20 mM total	1 x 20 µmol 5 x 20 µmol	NU-0010-10 NU-0010-50
dNTP Set 100 mM total	4 x 25 µmol	NU-0020-50
Red'y'Star Mix	5 x 1 ml	PK-0073-02R
SmartLadder DNA ladder	1000 lanes	MW-1700-10
Molecular Biology Grade Agarose	500 g 1000 g	EP-0010-05 EP-0010-10
Mupid®-One electrophoresis system	1	MU-0041

For further information please contact our Customer Help Desk:

For Europe:

E-mail: info@eurogentec.com
Tel: +32 4 372 76 65

For USA:

E-mail: info.anaspec@eurogentec.com
Tel.: 510-791-9560 • toll-free: 800-452-5530

NOTICE TO PURCHASER : LIMITED LICENSE

Roche Enzyme Products Conveying Polymerase Patent Rights • Use of this product is covered by one or more of the following US patents and corresponding patent claims outside the US: 5,789,224, 5,618,771, 6,127,155 and claims outside the US corresponding to expired US Patent No. 5,079,352. The purchase of this product includes a limited, non-transferable immunity from suit under the foregoing patent claims for using only this amount of product for the purchaser's own internal research. No right under any other patent claim, no right to perform any patented method, and no right to perform commercial services of any kind, including without limitation reporting the results of purchaser's activities for a fee or other commercial consideration, is conveyed expressly, by implication, or by estoppel. This product is for research use only. Diagnostic uses under Roche patents require a separate license from Roche. Further information on purchasing licenses may be obtained by contacting the Director of Licensing, Applied Biosystems, 850 Lincoln Centre Drive, Foster City, California 94404, USA.

Chemically-Modified Hot-Start Polymerase Reagents and Kits • Use of this product is covered by one or more of the following US patents and corresponding patent claims outside the US: 6,127,155 5,677,152 (claims 1 to 23 only), 5,773,258 (claims 1 and 6 only), and claims outside the US corresponding to expired US Patent No. 5,079,352. The purchase of this product includes a limited, non-transferable immunity from suit under the foregoing patent claims for using only this amount of product for the purchaser's own internal research. No right under any other patent claim and no right to perform commercial services of any kind, including without limitation reporting the results of purchaser's activities for a fee or other commercial consideration, is conveyed expressly, by implication, or by estoppel. This product is for research use only. Diagnostic uses under Roche patents require a separate license from Roche. Further information on purchasing licenses may be obtained by contacting the Director of Licensing, Applied Biosystems, 850 Lincoln Centre Drive, Foster City, California 94404, USA.

Mupid® is a registered trademark of Advance Co., Ltd.