Data sheet

Green-Taq DNA polymerase

Cat. No: P0029 5x 100 reactions Ready-to-use

Introduction

Green-Tag DNA polymerase is a ready-to-use 2x master mix that contains all PCR reaction components: dNTPs, PCR buffer, Mg²⁺ and Taq DNA polymerase. Only primers and template need to be added.

The mix also contains an agarose loading buffer including two tracking dyes (blue and yellow dye) for visual tracking of DNA migration and a dense compound to facilitate the drop-down of the samples into the well agarose gels. The blue dye (migrates with 3 to 5 kb DNA fragments in 1% agarose gel) and the yellow dye (migrates faster than 10 bp DNA fragments in 1% agarose gel).

Features

- Ready-to-use
- Adds extra nucleotides (preferentially adenine) without template at 3'ends leaving 3'overhangs PCR fragments. This fact allows the popular TA-cloning or GC cloning
- Both save times in the PCR process and in agarose loading samples.

Applications

- Design for medium or high throughput applications (e.g. colony screening)
- PCR fragments amplification for TA or GC cloning

Unit definition

One unit is defined as the amount of enzyme required to catalyse the incorporation of 10 nanomoles of dNTPs into acid-insoluble material in 30 minutes at 74°C.

Assay conditions

Enzyme activity is assayed in the following mixture: 25mM Tris-HCl pH 9.0 at 25°C, 50mM KCl, 2mM MgCl2, 0.1mg/mL gelatine, 200 μM de dATP, dGTP, dTTP, $100\mu M[\alpha 32-P]dCTP$ (0.05 $\mu Ci/nmol$) and 12.5 μg activated salmon sperm DNA.

Concentration:

2X (Buffer Green 2X; dNTPs 0.4 mM each; Horse-Power Tag DNA polymerase 0.2 U/μL, Glycerol 24%).

Quality Certifications

- Functionally tested in PCR.
- Undetected bacterial DNA (by PCR).
- Undetectable nucleases activity (endo-, exo, and ribo-).

Storage: Store at -20°C.



Tallaght Business Park Whitestown, Dublin 24, Ireland D24 RFK3

Tel: (01) 4523432 Fax: (01) 4523967

Web: www.labunlimited.com

Quatro House, Frimley Road, Camberley, United Kingdom **GU16 7ER**

Tel: 08452 30 40 30 Fax: 08452 30 50 30 E-mail: info@labunlimited.com E-mail: info@labunlimited.co.uk Web: www.labunlimited.co.uk

(Continued on reverse side)





Recomended PCR assay (20 µl assay)

Green-Taq mix 2X 10µl (1X)

Forward Primer (15µM) 1μl (0.75 pmol/ μ L)

Reverse Primer (15µM) $1\mu l (0.75 \text{ pmol/}\mu L)$

Template DNA plasmide: 30-75ng; gDNA: 100-500ng

PCR grade H₂0 up to 20 μl

Cycling instructions: 94°C 5:00, 25-30x (94°C 0:35, Tm 0:35, 72°C 1'/kb), 72°C 7:00, 4°C ∞)

PRODUCT USE LIMITATION

This product is developed, designed and sold exclusively for research purposes and in vitro use only. The product was not tested for use in diagnostics or for drug development, nor is it suitable for administration to humans or animals. Please refer to www.canvaxbiotech.com for Material Safety Data Sheet of the product.



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Tel: 08452 30 40 30 Fax: (01) 4523967 Fax: 08452 30 50 30
E-mail: info@labunlimited.com
Web: www.labunlimited.com
Web: www.labunlimited.co.uk

