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DATA SHEET

Version: 2
Revision date: 28/04/2023

1. Identification

Product name **Horse-Power™ Taq DNA Polymerase Master Mix 2X**
250 rxn

Cat. No **P0035**

2. Description

Horse-Power™ Taq DNA Polymerase Master Mix (2X) is an optimized ready-to-use 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 convenient 2x master mix formulation saves time and eliminates the risk of contamination due to a reduced number of pipetting steps required.

3. Composition

Item	Quantity
Horse-Power™ Taq DNA Polymerase Master Mix 2X	2 x 1.25 mL

Concentration: (Buffer PCR 2X; dNTPs 0.4 mM each dNTP (dATP, dCTP, dGTP and dTTP); 4 mM MgCl2; Taq DNA polymerase 0.1 U/µL and Glycerol 4%.

4. 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.

Quality:

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

5. Storage specifications

Store at -20° C

6. Applications

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

7. 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, 100µM[α32-P]dCTP (0.05µCi/nmol) and 12.5 µg activated salmon sperm DNA.

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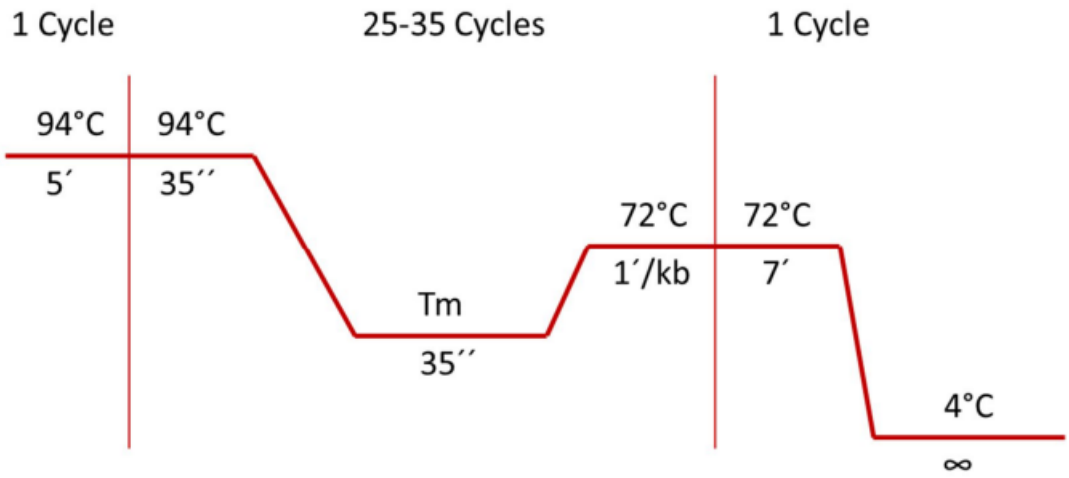
8. Recomended PCR Assay (20µL assay)

The following protocol can be used as a starting point for reaction optimization. The optimal conditions will vary from reaction to reaction and are dependent on the template/primers used.

Taq DNA Polymerase Master mix 2X	10µl (1X)
Forward Primer (15µM)	1µl (0.75 pmol/µL)
Reverse Primer (15µM)	1µl (0.75 pmol/µL)
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 ∞)



9. Further information

Product Use Limitation This product is developed, designed, and sold exclusively only for research purposes use. The product was not tested for use in diagnostics or for drug development, nor is it suitable for administration to humans or animals.

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