

Methylamp Hot Taq Power Mix Ready-to-Load 12.5 mM

(Catalog No. R12023)

Description

Methylamp Hot Taq Power Mix is a premixed ready-to-load solution containing: all reagents required for PCR (except template, primers and water), compound needed for direct loading onto agarose gel and two tracking dyes to follow the electrophoresis. Methylamp Hot Taq Power Mix contains two enzymes – Methylamp Hot Taq DNA polymerase and a proofreading polymerase. These enzymes together have both the 5' to 3' exonuclease activity as well as the 3' to 5' proofreading activity.

Composition

- Methylamp Hot Taq DNA Polymerase
- Proofreading enzyme
- 5x Reaction Buffer
- 12.5 mM MgCl₂: 1x PCR solution – 2.5 mM MgCl₂
- 2 mM dNTPs of each: 1x PCR solution – 200 μM dATP, 200 μM dCTP, 200 μM dGTP and 200 μM dTTP
- BSA
- Blue dye: Migration equivalent to 3.5-4.5 kb DNA fragment
- Yellow dye: Migration rate in excess of primers in 1% agarose gel: <35-45 bp
- Compound that increases sample density for direct loading
- 1 ml of mix is sufficient for 250 reactions

Applications

- Hot Start
- PCR Proofreading

Unit Definition

One unit is defined as the amount of enzyme required to catalyze the incorporation of 10 nmol of dNTPs into an acid-insoluble form in 30 minutes at 74°C.

Recommendations

Reaction setup at room temperature is highly recommended for Methylamp Hot Taq Power Mix. We recommend using Methylamp Hot Taq Power Mix in any PCR applications that will be visualized by agarose gel electrophoresis and EpiQuik DNA Stain or ethidium bromide staining.

Safety warnings and precautions

This product is designed for research purposes and in vitro use only. According to common laboratory safety practice, it is recommended to wear protective clothing, gloves and safety glasses. Please refer to www.epigentek.com for Material Safety Data Sheet of the product. Some applications this product is used in may require a license which is not provided by the purchase of this product. Users should obtain the license if required.

Storage Conditions

Routine storage: -20°C. Shipping and temporary storage for up to 1 month at room temperature or storage for up to 6 months at 2-8°C has no detrimental effects on the quality of Methylamp Hot Taq Power Mix.

Ordering Information

Products

Methylamp Hot Taq Power Mix Ready-to-Load 12.5 mM

Size

1 ml

Cat. No.

R12023-1

Recommended PCR reaction mix:

Component	Volume	Final Conc.
Methylamp Hot Taq Power Mix Ready-to-Load	4 μl	1x
Forward Primer (10 pmol/μl)	0.2-0.6 μl	0.1-0.3 μM
Reverse Primer (10 pmol/μl)	0.2-0.6 μl	0.1-0.3 μM
Template DNA	x μl	5-50 ng/μl
Add H ₂ O	Up to 20 μl	

Recommended PCR cycles:

Cycle step	Temp.	Time	Cycles
Initial Denaturation	95°C	12-15 min	1
Denaturation	95°C	10-20 s	25-30
Annealing	54-66°C	30-60 s	25-30
Elongation	72°C	20 s-4 min	25-30
Final Elongation	72°C	5-10 min	

IMPORTANT: To activate the polymerase, include an incubation step at **95°C for 12 - 15 minutes** at the beginning of the PCR cycle

This product is for research purposes only. Not intended for use in diagnostic procedures.