

# Methylamp Hot Taq Probe qPCR Mix (ROX)

(Catalog No. R12024)

## Description

Methylamp Hot Taq Probe qPCR Mix (ROX) is optimized for real-time quantitative PCR assays and contains all the components necessary to perform qPCR, with the exception of template, primers, and probe. The qPCR Mix (ROX) contains optimized components and Methylamp Hot Taq DNA polymerase supplied in a proprietary reaction buffer that enables detection of low copy number targets. Methylamp Hot Taq DNA polymerase is activated by a 15 min incubation step at 95°C. This prevents extension of non-specifically annealed primers and primer-dimers formed at low temperatures during qPCR setup.

Methylamp Hot Taq Probe qPCR Mix (ROX) is compatible for use with any probe system and qPCR cyclers requiring high ROX dye level, including ABI PRISM® 5700, 7000, 7300, 7700, 7900 and 7900HT (including Fast-Block); Stratagene Mx3000P™, Mx3005P™ and Mx4000®.

## Composition

- Methylamp Hot Taq DNA polymerase
- 5 x qPCR buffer P
- 15 mM MgCl<sub>2</sub>: 1 x PCR solution – 3 mM MgCl<sub>2</sub>
- dNTPs, including dTTP to improve reaction sensitivity and efficiency compared to dUTP
- ROX dye (ROX dye is an internal passive reference dye used to normalize the fluorescent reporter signal generated in qPCR.)
- 1 ml of mix is sufficient for 250 reactions

## Recommended PCR reaction mix:

Component	Volume	Final Conc.
Methylamp Hot Taq Probe qPCR Mix	4 µl	1x
Primer Forward (10 pmol/µl)	0.4-0.8 µl	200-400 nM
Primer Reverse (10 pmol/µl)	0.4-0.8 µl	200-400 nM
Probe	1 µl	100-250 nM
DNA Template	1-5 µl	1-50 ng/ µl
H <sub>2</sub> O PCR Grade	Up to 20 µl	
<b>Total</b>	<b>20 µl</b>	

## Applications

- Detection and quantification of DNA and cDNA targets including DNA from bisulfite treatment, ChIP or MeDIP
- Profiling gene expression
- High Resolution Melt (HRM)
- Analysis Microbial detection
- Viral load determination

## Recommended PCR cycles:

Cycle step	Temp.	Time	Cycles
Initial Denaturation	95°C	15 min	1
Denaturation	95°C	15 s	40
Annealing/ Elongation	60°C	60 s	40

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

## Storage Conditions

Routine storage: -20°C. Shipping and temporary storage for up to 1 month at room temperature has no detrimental effects on the quality of Methylamp Hot Taq Probe qPCR Mix (ROX).

## Ordering Information

### Products

Methylamp Hot Taq Probe qPCR Mix (ROX)

### Size

1 ml

### Cat. No.

R12024-1

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