

# Methylamp Hot Taq EvaGreen® qPCR Mix (no ROX)

(Catalog No. R12028)

## Description

Methylamp Hot Taq EvaGreen® qPCR Mix (no ROX) is optimized for real-time quantitative PCR assays. The ready-to-use mix includes Methylamp Hot Taq DNA polymerase, ultrapure dNTPs, MgCl2 and EvaGreen® dye. Only water, template and primers need to be added. Methylamp Hot Taq DNA polymerase is activated by a 15 min incubation step at 95°C. This prevents extension of nonspecifically annealed primers and primer-dimers formed at low temperatures during qPCR setup.

EvaGreen® Dye: EvaGreen® is a DNA-binding dye for qPCR that, compared to SYBR® Green I, has similar spectra but much less PCR inhibition. It is extremely stable dye and has been shown to be nonmutagenic and noncytotoxic. EvaGreen® is compatible with all common real-time PCR cyclers – simply select the standard settings for SYBR® Green or FAM!

Methylamp Hot Taq EvaGreen® qPCR Mix (no ROX) can be used with all major qPCR cyclers that do not require reference dye, including Bio-Rad iQ<sup>™</sup> 5, Opticon<sup>™</sup>, Opticon<sup>™</sup> 2; Chromo 4<sup>™</sup>, MiniOpticon, CFX96, CFX384; Corbett Rotor-Gene<sup>™</sup> 3000, Rotor-Gene<sup>™</sup> 6000; Roche LightCycler® 480 and Techne Quantica<sup>™</sup>.

### Composition

- Methylamp Hot Taq DNA polymerase
- 5 x qPCR buffer E
- 12.5 mM MgCl2: 1 x PCR solution 2.5 mM MgCl2
- dNTPs, including dTTP to improve reaction sensitivity and efficiency compared to dUTP
- EvaGreen® dye
- no ROX dye
- 1 ml of mix is sufficient for 250 reactions

## 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 reaction mix:

Component	Volume	Final Conc.	
Methylamp Hot Taq	<b>4</b> ml	1x	
EvaGreen qPCR Mix	4 µl	IX	
Primer Forward	0.16-0.5 µl	80-250 nM	
(10 pmol/µl)	υ. 10-υ.5 μι		
Primer Reverse	0.16-0.5 µl	80-250 nM	
(10 pmol/µl)	υ. 10-υ.5 μι	00-250 HIVI	
DNA Template	1-5 µl	1-50 ng/ μl	
H <sub>2</sub> O PCR Grade	Up to 20 µl		
Total	20 µl		

# Recommended PCR cycles:

Cycle step	Temp.	Time	Cycles
Initial	95°C	15 min	1
Denaturation	95°C	15 111111	I I
Denaturation	95°C	15 s	40
Annealing	60-65°C	20 s	40
Elongation	72°C	20 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 Tag EvaGreen® qPCR Mix (no ROX).

# **Ordering Information**

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