

Methylamp Hot Taq EvaGreen® qPCR Mix (ROX)

(Catalog No. R12027)

Description

Methylamp Hot Taq EvaGreen® qPCR Mix (ROX) is optimized for real-time quantitative PCR assays. The ready-to-load mix includes Methylamp Hot Taq DNA polymerase, ultrapure dNTPs, MgCl2, EvaGreen® dye and ROX dye according to system requirements. 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 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!

ROX Dye: ROX is an internal passive reference dye used to normalize the fluorescent reporter signal generated in qPCR.

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
- 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	4 µl	1x	
EvaGreen qPCR Mix	· p	• • • • • • • • • • • • • • • • • • • •	
Primer Forward	0.16-0.5 µl	80-250 nM	
(10 pmol/µl)	υ. 10-υ.5 μι		
Primer Reverse	0.16.0.51	80-250 nM	
(10 pmol/µl)	0.16-0.5 µl		
DNA Template	1-5 µl	1-50 ng/ μl	
H ₂ 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	Į.
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 Taq EvaGreen® qPCR Mix (ROX).

Ordering Information

ProductsSizeCat. No.Methylamp Hot Taq EvaGreen® qPCR Mix (ROX)1 mlR12027-1

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