

Data Sheet (01.06.2005)

# mi-Hot Taq

## Hot start Thermostable DNA Polymerase (for real-time PCR)

Source: *Thermus aquaticus*, strain YT-1

Cat.-No.	Size	Conc.
<u>mi-E8010S</u>	200 units	5 units/ $\mu$ l
mi-E8010L	1000 units	5 units/ $\mu$ l

For *in vitro* use only!

### Unit definition

One unit is defined as the amount of the enzyme required to catalyze the incorporation of 10 nmol of dNTP into an acid-insoluble form in 30 minutes at 72°C.

### Hot Taq Pol in storage buffer (red cap)

10 mM Tris-HCl (pH 7.0), 50 mM KCl, 0.1 mM EDTA, 50% glycerol

### 10x Reaction buffer with MgCl<sub>2</sub> (green cap)

160 mM (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>, 670 mM TrisHCl pH 8.8, 0.1% Tween-20, 25 mM MgCl<sub>2</sub>

### 10x Reaction buffer without MgCl<sub>2</sub> (blue cap)

160 mM (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub>, 670 mM TrisHCl pH 8.8, 0.1% Tween-20

### MgCl<sub>2</sub> stock solution (yellow cap)

100 mM MgCl<sub>2</sub>  
Recommended MgCl<sub>2</sub> concentration: 1.5-6 mM

Store at -20°C

### Description

mi-Hot Taq is the optimized mixture of Taq DNA Polymerase and anti-Taq DNA polymerase monoclonal antibodies. The antibodies block polymerase activity during set-up of the PCR reactions at room temperature (20-22°C). The inhibition of Taq DNA polymerase is completely reversed at a temperature above 70°C. The PCR products obtained with mi-Hot Taq are free of unspecific products and primer-dimers. It is tested for the absence of endodeoxyribonucleases and exodeoxyribonucleases.

### Applications

mi-Hot Taq is tested for the amplification of a single-copy gene of mouse genomic DNA and recommended for complex genomic DNA or cDNA templates, low copy number of targets, large numbers of thermal cycles and multiplex PCR. It is especially suited for real-time PCR.