Data Sheet (15.02.2016)

mi-Hot *Taq*

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

Source: *Thermus aquaticus, strain YT-1*

Cat.-No.	Size	Conc.
mi-E8010S	200 units	5 units/µl
mi-E8010L	1000 units	5 units/µl

For research use only! Only for* in vitro *use!

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 complete KCl (black cap)
500 mM KCl, 100 mM TrisHCl pH 8.8, 0.1 % Tween-20, 15 mM $MgCl_2$

10x Reaction buffer complete $(NH_4)_2SO_4$ (green cap)
160 mM $(NH_4)_2SO_4$, 670 mM TrisHCl pH 8.8, 0.1 % Tween-20, 25 mM $MgCl_2$

10x Reaction buffer $(NH_4)_2SO_4$ without $MgCl_2$ (blue cap)
160 mM $(NH_4)_2SO_4$, 670 mM TrisHCl pH 8.8, 0.1 % Tween-20

$MgCl_2$ stock solution (yellow cap)
100 mM $MgCl_2$
Recommended $MgCl_2$ concentration: 1.5-6 mM

Storage conditions: - 20 ± 5°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.
No detectable endodeoxyribonucleases and exodeoxyribonucleases activity.

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.