



***The ENZYME Company***

---

**SUPERHOT TAQ RED DNA Polymerase**  
**(for "Hot-start" PCR)**

<b>Description:</b>	Super <i>Taq RED DNA</i> Polymerase is the optimized mixture of <i>Taq DNA</i> Polymerase with chemically attached chromogenic molecule (the enzyme is stained in red), Anti- <i>Taq DNA</i> polymerase monoclonal antibodies and polymerase. Antibodies block polymerase activity during set-up of the PCR reactions at ambient temperature (20-22 °C). The inhibition of <i>Taq DNA</i> polymerase is completely reversed when the temperature is above 70°C. The PCR products obtained with SUPERHOT TAQ RED are free from unspecific products and from primer-dimers.
<b>Unit Definition:</b>	One unit defined as the amount of the enzyme required to incorporate 10 nmoles of dNTP into acid-insoluble DNA fraction in 30 minutes at 72°C.
<b>Reaction buffer (x10) "incomplete" supplied:</b>	160 mM (NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub> , 670mM TrisHCl pH8,8, 0,1% Tween-20
<b>Reaction buffer (x10) "complete" supplied:</b>	160 mM (NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub> , 670mM TrisHCl pH8,8, 0,1% Tween-20, 25mM MgCL <sub>2</sub>
<b>Reaction buffer (x10) "complete II KCl" supplied:</b>	500 mM KCl, 100 mM TrisHCl pH8,8, 0,1% Tween-20, 15mM MgCL <sub>2</sub>
<b>Storage Buffer:</b>	10mM Tris-HCl (pH 7.0); 50mM KCl; 0.1mM EDTA; 50% glycerol
<b>Storage conditions:</b>	Long term storage: -20°C
<b>Concentration:</b>	5000 units/ml
<b>Recommended PCR conditions:</b>	Use PCR conditions optimized for <i>Taq DNA</i> polymerase. In the case of low amount of DNA template, additional cycles may be used.
<b>Applications:</b>	Complex genomic or cDNA templates, low copy numbers targets, large numbers of thermal cycles, multiplex PCR

Version AS22062006