

SuperHot Taq DNA Polymerase

Taq DNA Polymerase for HotStart PCR.

Product No. A5231

Description

SuperHot Taq DNA Polymerase is the optimized mixture of *Taq DNA Polymerase* and anti-*Taq DNA polymerase* monoclonal antibodies. Antibodies block polymerase activity during the set-up of the PCR reactions at ambient temperature (20 - 22°C). The inhibition of *Taq DNA polymerase* is completely reversed when the temperature is above 70°C. The PCR products obtained with *SuperHot Taq* are free from unspecific products and from primer-dimers.

Unit definition: One unit is defined as the amount of enzyme required to incorporate 10 nmoles of dNTP into an acid-insoluble DNA fraction in 30 minutes at 72°C.

Supplied in **Storage buffer:** 10 mM Tris · HCl (pH 7.0), 50 mM KCl, 0.1 mM EDTA, and 50 % glycerol.

Supplied with 3 **Reaction buffers (10X):**

1 Tube	'incomplete'	160 mM (NH ₄) ₂ SO ₄ , 670 mM Tris · HCl (pH 8.8), 0.1 % Tween [®] 20.
1 Tube	'complete'	160 mM (NH ₄) ₂ SO ₄ , 670 mM Tris · HCl (pH 8.8), 0.1 % Tween [®] 20, 25 mM MgCl ₂
1 Tube	'complete II KCl'	500 mM KCl, 100 mM Tris · HCl (pH 8.8), 0.1 % Tween [®] 20, 15 mM MgCl ₂
1 Tube	MgCl₂ (100 mM)	

Recommended Reaction buffer (1X): 16 mM (NH₄)₂SO₄, 67 mM Tris · HCl (pH 8.8); 1.5 - 7 mM MgCl₂, 0.01% Tween[®] 20

Recommended PCR conditions: Use PCR conditions optimized for *Taq DNA polymerase*. In the case of low amount of DNA template, additional cycles may be used.

Applications: Complex genomic or cDNA templates, low copy number targets, large numbers of thermal cycles, multiplex PCR

Storage Conditions: -20°C

Concentration: 5000 units/ml