

Hotstart Taq DNA Polymerase

Storage Conditions: Store at -20°C. It is stable a year from the date of receipt under storage condition.

Applications: Primer extension: PCR reaction..

Quality Control: Free of endonucleases and exonucleases.

Description: Hotstart *Taq* DNA polymerase is a modified thermostable enzyme that possesses a non-processive 5'-3' polymerase. The source of this enzyme is an *E.coli* strain that carries the Taq DNA Polymerase gene from Thermus aquaticus YTI.

Storage buffer: 50 mM Tris pH 8.0, 100 mM NaCl, 1 mM DTT, 50% glycerol, 0.1 mM EDTA, 1% TritonX-100.

Reaction buffer (10X): Tris pH 8.3, MgCl₂ and KCL at 5 units/µl

Unit definition: One unit is defined as the amount of enzyme required to incorporate 10 nmol of dNTP into acid insoluble material in 30 minutes at 75°C.

Reaction conditions for 50 µl reaction

Components	Volume (µl /reaction)	Final concentration	
Hot Start PCR buffer	5	10X	
dNTP	4	10 mM	
Hot Start Taq	0.5		
H ₂ O	Х		
Primers	Х		
DNA template	Х	10 ng- 5 μg	
Total volume	50 μl		

General cycling conditions:

	Hot Start 25-40 CYCLES			Final		
	activation	Denaturation	Annealing	Extension	Extension	Hold
Time	10 min.	30 sec.	30 sec. – 1 min	1 min/kb	5 min.	-
Temp.	95 ℃	95 ℃	50 – 65 °C	72 °C	72 °C	4°C

Intended use of the products: All products sold by AMSBIO are intended for research use only and must not be used for medical diagnostic or drug purposes. AMSBIO products may not resell, modified for resale or used to manufacture commercial products without written approval from AMSBIO.

Limited product warranty: AMSBIO has a total quality assurance policy. If an y product does not meet the specification stated in the product data sheet will be replaced at no charge. This warranty limits AMSBIO liability to the replacement of the product only. No other warranties of an y kind, express or implied, including without limitation, implied warranties of merchantability or fitness for a particular purpose, are provided by AMSBIO. AMSBIO shall not liable for an y incidental, in direct, special or consequential damages, even if it is aware of the possibility of such damages.

