MADE IN GERMANY

Lot.

MANUAL

Ref. SB0080

Expiry date: 1 year

STORE AT -20°C

DNA POLYMERASE (RECOMBINANT)

-Only for research use-
-To be used by a technical person-

5 units per ul

CONTENT: DNA Polymerase (1000 units) and storage buffer

DESCRIPTION: Genekam DNA Polymerase is a thermostable DNA polymerase purified from the Thermus aquaticus strain by several rounds of liquid chromatography. The purity of GenekamDNA Polymerase is more then 90% of the total protein in the preparation. Amplification of DNA fragments (100 bp to 5 kb) can be achieved with it. The enzyme has both, 5'-3' polymerase- and 5'-3'exonuclease activities. Genekamcan add a Single template-directed deoxyadenosin (A) residue to the 3' end of duplex PCR products. This property allows easy and efficient ligation of PCR products in TA cloning vectors.

CONCENTRATION: 5 units/ul.

UNIT DEFINITION: One unit is defined as the amount of enzyme that incorporates 10 nmoles of dNTPs into acid-insoluble form in 30 minutes at 72°C under the assay conditions (25 mM TAPS (tris-(hydroxy-methyl)-methyl-amino-propa-nesulfonic acid, sodium salt) pH 9.3 (at 25°C), 50 mM KC1, 2 mM MgC12, 1 mM ß-mercaptoethanol) and activated calf thymus DNA as Substrate.

STORAGE BUFFER: 10 mM K-phosphate buffer pH 7.0, 100 mM NaCl, 0,5 mM EDTA, 1 mM DTT, 0,01% Tween 20, 50% glycerol (v/v).

REACTION BUFFER: Reactionbuffer (lOx): 160 mM (NH4)2SO4, 670 mM Tris-HCl (pH 8,8 at 25°C), 15 mM MgCl2, 0,1% Tween-20.

STORAGE TEMPERATURE: Store Genekam Polymerase below 0 C preferably at -20 C, in a constant temperature freezer.

QUALITY CONTROL: GenekamDNA Polymerase was tested for the absence of unspecific endo- and exonucleases activities.

SHELF LIFE: 2 years from date of receipt under proper storage conditions.

FUNCTIONAL ANALYSIS: Tested functionally in a unit activity test.

If you should find any mistakes, please let us know. Thank you.

Suggestion:	**Genekam Biotechnology AG**
This manual has been written specifically for beginners, hence persons with experience in PCR must use their experience to keep each step as small as possible e.g. you should calculate the amount of the needed chemicals, before starting with testing.	**Dammstr. 31-33** **47119 Duisburg** **Germany** **Tel. (+49) 203 / 555858-31,-32,-33** **Fax (+49) 203 / 35 82 99**
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