

Products	Cat #	Pack Size
SynergyPlus™ DNA Polymerase	GC-048-0250	250 u
SynergyPlus™ DNA Polymerase	GC-048-0500	500 u
SynergyPlus™ DNA Polymerase	GC-048-1000	1000 u
SynergyPlus™ DNA Polymerase	GC-048-5000	5000 u

DESCRIPTION

SynergyPlus™ DNA Polymerase is a mixture of a KlenTherm with addition of pyrophosphatase for the amplification of **very long fragments**. SynergyPlus™ DNA polymerase can amplify up to **20 kb from genomic DNA**.

APPLICATION

- **Very Long and accurate PCR**

CONCENTRATION

5 units/μl

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-(hydroxymethyl)methyl-amino-propanesulphonic acid, sodium salt) pH 9.3 (at 25°C), 50 mM KCl, 2 mM MgCl₂, 1 mM -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)

STORAGE TEMPERATURE

Store SynergyPlus™ DNA polymerase below 0°C, preferably at -20°C, in a constant temperature freezer.

REACTION BUFFER

160 mM (NH₄)₂SO₄, 670 mM Tris-HCl pH 9,1; 8% Glycerol, 2% DMSO, 35 mM MgCl₂

Please note the difference between Synergy™ and BioTherm™ reaction buffers!.

QUALITY CONTROL

Activity, SDS-PAGE purity, absence of endonucleases/ nickases and exonucleases.