



## Recombinant Protein Technical Manual

Recombinant Human DNA Polymerase  $\beta$ /POLB  
Protein (His Tag)  
RPES2462

### Product Data:

**Product SKU:** RPES2462

**Size:** 10 $\mu$ g

**Species:** Human

**Expression host:** E. coli

**Uniprot:** P06746

### Protein Information:

**Molecular Mass:** 39.2 kDa

**AP Molecular Mass:** 39 kDa

**Tag:** C-6His

**Bio-activity:**

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per  $\mu$ g as determined by the LAL method.

**Storage:** Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

**Shipping:** This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.

**Formulation:** Supplied as a 0.2  $\mu$ m filtered solution of 20mM TrisHCl, 100mM NaCl, 1mM DTT, 1mM EDTA, 50% Glycerol, pH 7.8.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** DNA Polymerase Beta; POLB

## Immunogen Information:

**Sequence:** Ser2-Glu335

## Background:

Human DNA polymerase  $\beta$  is constitutively expressed in cells. It fills in gaps in DNA that are formed following base excision repair. Repair polymerase that plays a key role in base-excision repair. Has 5'-deoxyribose-5-phosphate lyase (dRP lyase) activity that removes the 5' sugar phosphate and also acts as a DNA polymerase that adds one nucleotide to the 3' end of the arising single-nucleotide gap. It conducts 'gap-filling' DNA synthesis in a stepwise distributive fashion rather than in a processive fashion as for other DNA polymerases. The activity cannot be affected by Aphidicolin, which is an inhibitor of DNA polymerase  $\beta$ .