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# Recombinant Human DNA Polymerase β/POLB Protein (His Tag)

Catalog Number: PKSH032360

Note: Centrifuge before opening to ensure complete recovery of vial contents.

## Description

Species Human

Source E.coli-derived Human DNA Polymerase β; POLB protein Ser2-Glu335, with an C-

terminal His

Calculated MW39.2 kDaObserved MW39 kDaAccessionP06746

**Bio-activity** Not validated for activity

#### **Properties**

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

**Concentration** Subject to label value.

Endotoxin < 1.0 EU per µg of the protein as determined by the LAL method.

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

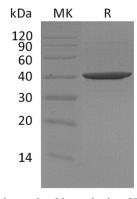
**Shipping** This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel

packs. Upon receipt, store it immediately at < - 20°C.

Formulation Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl, 100mM NaCl, 1mM DTT,

1mM EDTA, 50% Glycerol, pH 7.8.

#### Data



> 95 % as determined by reducing SDS-PAGE.

### 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  $\beta$ .