

AR39132PU-L**Human DNA polymerase beta (1-335, His-tag) - Purified****Alternate names:**

POLB

Quantity:

0.5 mg

Concentration:

0.5 mg/ml (determined by Bradford assay)

Background:

DNA polymerase beta, also known as POLB, belongs to the DNA polymerase type-X family. In eukaryotic cells, DNA polymerase beta (POLB) performs base excision repair (BER) required for DNA maintenance, replication, recombination, and drug resistance. POLB has two distinct domains, the larger is the polymerase domain itself, whereas a small basic N-terminal domain contains an AP lyase activity that excises the abasic sugar-phosphate residue at the strand break. POLB fills single nucleotide gaps in DNA produced by the base excision repair pathway of mammalian cells. Overexpression of POLB, as found in some human tumors, could confer an increase in spontaneous mutagenesis.

Uniprot ID:[P06746](#)**NCBI:**[NP_002681](#)**GenelD:**[5423](#)**Species:**

Human

Source:

E. coli

Format:**State:** Liquid purified protein**Purity:** >90%**Buffer System:** 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 30% glycerol, 0.1M NaCl**Description:**

Recombinant human POLB protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

AA Sequence:

MGSSHHHHHH SSGLVPRGSH MSKRKAPQET LGGITDMLT ELANFEKNVS QAIHKYNAYR
KAASVIAKYP HKIKSGAEAK KLPVGVGKIA EKIDEFLATG KLRKLEKIRQ DDTSSSINFL
TRVSGIGPSA ARKFVDEGIK TLEDLRKNED KLNHHQRIGL KYFGDFEKRI PREEMLQMQD
IVLNEVKKVD SEYIATVCGS FRRGAESSGD MDVLLTHPSF TSESTKQPKL LHQVVEQLQK
VHFITDTLSK GETKFMGVCQ LPSKNDEKEY PHRRIDIRLI PKDQYYCGVL YFTGSDIFNK
NMRAHALEKG FTINEYTIRP LGVTGVAGEP LPVDSEKDIF DYIQWKYREP KDRSE

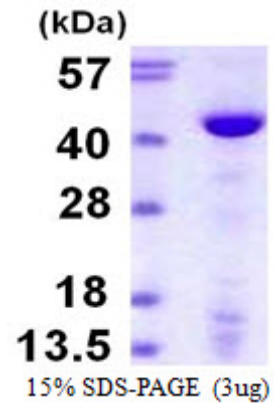
Molecular weight: 40.3 kDa (355aa), confirmed by MALDI-TOF**Storage:**

Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

Pictures:



Recombinant human POLB, 1-335aa, His-tagged

