

Datasheet for ABIN7547256  
**POLB Protein (AA 1-335) (His tag)**



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## Overview

Quantity:	1 mg
Target:	POLB
Protein Characteristics:	AA 1-335
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This POLB protein is labelled with His tag.

## Product Details

Purpose:	Custom-made recombinant POLB Protein expressed in mammalian cells.
Sequence:	<p>MSKRKAPQET LGGITDMLT ELANFEKNVS QAIHKYNAYR KAASVIAKYP HKIKSGAEAK            KLPGVGTKIA 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 DIYQWKYREP KDRSE</p> <p><b>Sequence without tag. The proposed Purification-Tag is based on experiences with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.</b></p>
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits:

## Product Details

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- Made to order protein - from design to production - by highly experienced protein experts.
- Protein expressed in mammalian cells and purified in one-step affinity chromatography
- The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins.
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity:	> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)
Grade:	custom-made

## Target Details

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Target:	POLB
Alternative Name:	POLB ( <a href="#">POLB Products</a> )
Background:	<p>DNA polymerase beta (EC 2.7.7.7) (5'-deoxyribose-phosphate lyase) (5'-dRP lyase) (EC 4.2.99.-) (AP lyase) (EC 4.2.99.18),FUNCTION: Repair polymerase that plays a key role in base-excision repair (PubMed:9207062, PubMed:9572863, PubMed:10556592). During this process, the damaged base is excised by specific DNA glycosylases, the DNA backbone is nicked at the abasic site by an apurinic/apyrimidic (AP) endonuclease, and POLB removes 5'-deoxyribose-phosphate from the preincised AP site acting as a 5'-deoxyribose-phosphate lyase (5'-dRP lyase), through its DNA polymerase activity, it adds one nucleotide to the 3' end of the arising single-nucleotide gap (PubMed:9572863, PubMed:9556598, PubMed:9614142, PubMed:10556592, PubMed:17526740). Conducts 'gap-filling' DNA synthesis in a stepwise distributive fashion rather than in a processive fashion as for other DNA polymerases. It is also able to cleave sugar-phosphate bonds 3' to an intact AP site, acting as an AP lyase (PubMed:9614142). {ECO:0000269 PubMed:10556592, ECO:0000269 PubMed:11805079, ECO:0000269 PubMed:17526740, ECO:0000269 PubMed:21362556, ECO:0000269 PubMed:9207062, ECO:0000269 PubMed:9556598,</p>

### Target Details

	ECO:0000269 PubMed:9572863, ECO:0000269 PubMed:9614142}.
Molecular Weight:	38.2 kDa
UniProt:	<a href="#">P06746</a>
Pathways:	<a href="#">DNA Damage Repair</a>

### Application Details

Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only

### Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months