

Product datasheet for TP516957

OriGene Technologies, Inc.

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Polh (NM_030715) Mouse Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Purified recombinant protein of Mouse polymerase (DNA directed), eta (RAD 30 related) (Polh),

with C-terminal MYC/DDK tag, expressed in HEK293T cells, 20ug

Species: Mouse

Expression Host: HEK293T

Expression cDNA Clone or AA

Sequence:

>MR216957 representing NM_030715

Red=Cloning site Green=Tags(s)

MAPGQNRVVALVDMDCFFVQVEQRQNPHLRNKPCAVVQYKSWKGGGIIAVSYEARAFGVTRNMWADDAKK

LCPDLLLAQVRESRGKANLTKYREASVEVMEIMSYFAVIERASIDEAYIDLTSAVQERLQKLQGQPISAD LLPSTYIEGLPRGPTVEETVQKEAIRKQGLLQWLDSLQSDDPTSPDLRLTVGAMIVEEMRAAIESKTGFQ CSAGISHNKVLAKLACGLNKPNRQTLVSHGSVPQLFSQMPIRKIRSLGGKLGASVIEVLGIEYMGDLTQF TESQLQSHFGEKNGSWLYAMCRGIEHDPVKPRQLPKTIGCSKNFPGKTALATREQVQWWLLQLALELEER LTKDRNDNDRVATQLVVSIRFQGDRRLSSLRRCCALPRYDAHKMSQDAFAAIRNCNTSGIQTEWSPPLTM LFLCATKFSAAAPPACTDITAFLSSDSSCQPKVPIASSETRTQGSGPAVPTSKEAATSLASFFQKAAKKQ RMKETSFVPLNTATEKLSSKPSLVFQSSQTTGSQSFFKQKSLLLQHTQLSNSAAPDPPQASPAAQPSCLP AECVDSGPDDGAVKPVSSKAVSTEMNVAGDSPNVLDSPAYNSQEVTQRATEDQVLCEKCDSLVPVWDMPE

HTDYHFALELQKSFLQPCTSKPQAIPAVSPQGKRNPKSPSASSSKRLRPHGMQTLESFFKPLTH

TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Tag: C-MYC/DDK

Predicted MW: 76.6 kDa

Concentration: $>0.05 \mu g/\mu L$ as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C after receiving vials.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and handling

conditions. Avoid repeated freeze-thaw cycles.





Polh (NM_030715) Mouse Recombinant Protein - TP516957

RefSeq: NP 109640

 Locus ID:
 80905

 UniProt ID:
 Q9]|N0

 RefSeq Size:
 2580

 Cytogenetics:
 17 C

 RefSeq ORF:
 2082

Synonyms: RAD30A; XPV

Summary: DNA polymerase specifically involved in the DNA repair by translesion synthesis (TLS)

(PubMed:10871396). Due to low processivity on both damaged and normal DNA, cooperates with the heterotetrameric (REV3L, REV7, POLD2 and POLD3) POLZ complex for complete bypass of DNA lesions. Inserts one or 2 nucleotide(s) opposite the lesion, the primer is further extended by the tetrameric POLZ complex. In the case of 1,2-intrastrand d(GpG)-cisplatin cross-link, inserts dCTP opposite the 3' guanine (By similarity). Particularly important for the repair of UV-induced pyrimidine dimers (PubMed:10871396). Although inserts the correct base, may cause base transitions and transversions depending upon the context. May play a role in hypermutation at immunoglobulin genes. Forms a Schiff base with 5'-deoxyribose phosphate at abasic sites, but does not have any lyase activity, preventing the release of the 5'-deoxyribose phosphate (5'-dRP) residue. This covalent trapping of the enzyme by the 5'-dRP residue inhibits its DNA synthetic activity during base excision repair, thereby avoiding high incidence of mutagenesis. Targets POLI to replication foci (By similarity).[UniProtKB/Swiss-Prot Function]