

Recombinant Human POLK, GST-tagged

Cat. No. POLK-765H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Human POLK full-length ORF (AAH50718, 1 a.a. - 472 a.a.) recombinant protein with GST-tag at N-terminal.
Species	Human
Source	Wheat Germ
Description	External and internal DNA-damaging agents continually threaten the integrity of genetic material in cells. Although a variety of repair mechanisms exist to remove the resulting lesions, some lesions escape repair and block the replication machinery. Members of the Y family of DNA polymerases, such as POLK, permit the continuity of the replication fork by allowing replication through such DNA lesions. Each Y family polymerase has a unique DNA-damage bypass and fidelity profile. POLK is specialized for the extension step of lesion bypass.
Molecular Mass	77.66 kDa
AA Sequence	MDSTKEKCDSYKDDLLLRMGLNDNKAGMEGLDKEKINKIIMEATKGSRYFGNELKKE KQVNQRIENMMQQAQIT SQQLRKAQLQVDRFAMELEQSRNLSNTIVHIDMDAFYA AVEMRDNPCLKDKPIAVGSMMLSTSNIYHARRFGVRA AMPGFIKRLCPQLIIVPPN FDKYRAVSKEVKEILADYDPNFMAMSLDEAYLNITKHLEERQNWPEDKRRYFIKM G SSVENDNPGKEVKNLSEHERSISPLLFEESPSDVQPPGDPFQVNFEEQNNPQILQN SVVFGTSAQEVVKEIRFR IEQKTTLTASAGIAPNTMLAKVCSDKNKPNGQYQILPNR QAVMDFIKDLPIRKVSGIGKVTEKMLKALGIITCTE LYQQRALLSLLFSETSWHYFLHI

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

SLGLGSTHLTRDGERKSMSVERTFSEINKAEEQYSLCQELCSELAQDLQKER LKVL
YFDMVSLVFKFFNSKMLP

Applications

Enzyme-linked Immunoabsorbent Assay; Western Blot; Antibody Production; Protein Array

Storage

Store at -80°C. Aliquot to avoid repeated freezing and thawing.

Storage Buffer

50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

GENE INFORMATION

Gene Name

POLK polymerase (DNA directed) kappa [Homo sapiens (human)]

Official Symbol

POLK

Synonyms

POLK; DINP; POLQ; DINB1; polymerase (DNA directed) kappa; DNA polymerase kappa; EC 2.7.7.7

Gene ID

51426

mRNA Refseq

NM_016218

Protein Refseq

NP_057302

MIM

605650

UniProt ID

Q9UBT6

**Chromosome
Location**

5q13

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Pathway	Fanconi anemia pathway
Function	DNA-directed DNA polymerase activity; damaged DNA binding; metal ion binding