





POLA1 Antibody

Product Code	CSB-PA156369
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P09884
Immunogen	Synthesized peptide derived from N-terminal of Human DNA Polymerase $\boldsymbol{\alpha}.$
Raised In	Rabbit
Species Reactivity	Human
Specificity	The antibody detects endogenous levels of total DNA Polymerase $\boldsymbol{\alpha}$ protein.
Tested Applications	ELISA,WB;WB:1:500-1:3000
Relevance	Plays an essential role in the initiation of DNA replication. During the S phase of the cell cycle, the DNA polymerase alpha complex (composed of a catalytic subunit POLA1/p180, a regulatory subunit POLA2/p70 and two primase subunits PRIM1/p49 and PRIM2/p58) is recruited to DNA at the replicative forks via direct interactions with MCM10 and WDHD1. The primase subunit of the polymerase alpha complex initiates DNA synthesis by oligomerising short RNA primers on both leading and lagging strands. These primers are initially extended by the polymerase alpha catalytic subunit and subsequently transferred to polymerase delta and polymerase epsilon for processive synthesis on the lagging and leading strand, respectively. The reason this transfer occurs is because the polymerase alpha has limited processivity and lacks intrinsic 3' exonuclease activity for proofreading error, and therefore is not well suited for replicating long complexes. Wong S.W., EMBO J. 7:37-47(1988). Pearson B.E., Mol. Cell. Biol. 11:2081-2095(1991). Hsi KL., Nucleic Acids Res. 18:6231-6237(1990).
Form	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Clonality	Polyclonal
Alias	DNA pol alpha; DNA polymerase alpha catalytic subunit; DPOA; DPOLA; EC 2.7.7.7
Product Type	Polyclonal Antibody
Species	Homo sapiens (Human)
Target Names	POLA1
Image	

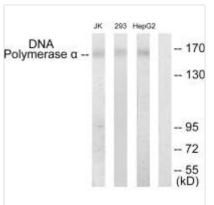


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Western blot analysis of extracts from Jurkat cells, 293 cells and HepG2 cells, using DNA Polymerase α antibody.