Product Datasheet

# DNA Polymerase α Antibody

Catalog No: #33665

Package Size: #33665-1 50ul #33665-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

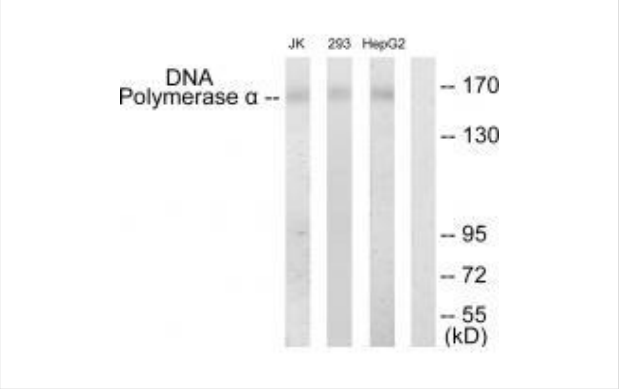
## Description

| | |
|---|---|
| Product Name | DNA Polymerase α Antibody |
| Host Species | Rabbit |
| Clonality | Polyclonal |
| Purification | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. |
| Applications | WB |
| Species Reactivity | Hu |
| Specificity | The antibody detects endogenous levels of total DNA Polymerase α protein. |
| Immunogen Type | Peptide |
| Immunogen Description | Synthesized peptide derived from N-terminal of human DNA Polymerase α. |
| Target Name | DNA Polymerase α |
| Other Names | DNA pol alpha; DNA polymerase alpha catalytic subunit; DPOA; DPOLA; EC 2.7.7.7 |
| Accession No. | Swiss-Prot: P09884NCBI Gene ID: 5422 |
| Uniprot | P09884 |
| GeneID | 5422; |
| SDS-PAGE MW | 165kd |
| Concentration | 1.0mg/ml |
| Formulation | Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. |
| Storage | Store at -20°C |

## Application Details

Western blotting: 1:500~1:3000

## Images




Western blot analysis of extracts from Jurkat cells, 293 cells and HepG2 cells, using DNA Polymerase α antibody #33665.

## Background

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 K.-L., Nucleic Acids Res. 18:6231-6237(1990).

Note: This product is for in vitro research use only