

PRIM1 Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51446

Specification

PRIM1 Antibody - Product Information

Application	WB
Primary Accession	P49642
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	49 KDa
Antigen Region	361 - 420

PRIM1 Antibody - Additional Information

Gene ID 5557

Other Names

DNA primase small subunit, 277-, DNA primase 49 kDa subunit, p49, PRIM1

Target/Specificity

KLH conjugated synthetic peptide derived from human PRIM1

Dilution

WB ~ 1:1000

Format

0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage

Store at -20 °C. Stable for 12 months from date of receipt

PRIM1 Antibody - Protein Information

Name PRIM1

Function

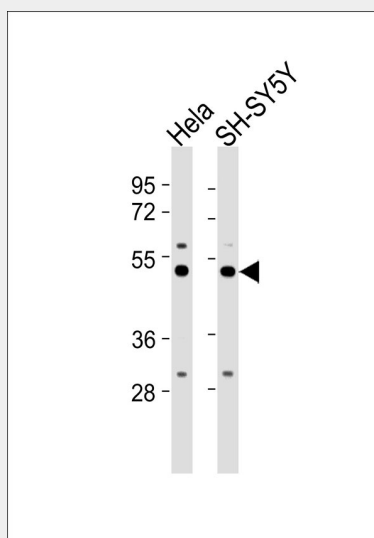
Catalytic subunit of the DNA primase complex and component of the DNA polymerase alpha complex (also known as the alpha DNA polymerase-primase complex - primosome/replisome) which play an essential role in the initiation of DNA synthesis (PubMed:9268648, PubMed:9705292, PubMed:17893144, PubMed:24043831, PubMed:26975377, PubMed:25550159, PubMed:31479243, PubMed:33060134). During the S phase of the cell cycle, the DNA polymerase alpha complex (composed of a catalytic subunit POLA1, an accessory subunit POLA2 and two primase subunits, the catalytic subunit PRIM1 and the regulatory subunit PRIM2) is recruited to DNA at the replicative forks via direct interactions with MCM10 and WDHD1 (By similarity). The primase subunit of the polymerase alpha complex initiates DNA synthesis by oligomerising short RNA primers on both leading and lagging strands (PubMed:17893144). 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 (By similarity). In the primase complex, both subunits are necessary for the initial di-nucleotide formation, but the extension of the primer depends only on the catalytic subunit (PubMed:17893144). Synthesizes 9-mer RNA primers (also known as the 'unit length' RNA primers). Incorporates only ribonucleotides in the presence of ribo- and deoxy-nucleotide triphosphates (rNTPs, dNTPs) (PubMed:26975377). Requires template thymine or cytidine to start the RNA primer synthesis, with an adenine or guanine at its 5'-end (PubMed:25550159, PubMed:26975377). Binds single stranded DNA (By similarity).

PRIM1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PRIM1 Antibody - Images



All lanes : Anti-PRIM1 Antibody at 1:1000 dilution Lane 1: HeLa whole cell lysates Lane 2: SH-SY5Y

whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 50 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

PRIM1 Antibody - Background

DNA primase is the polymerase that synthesizes small RNA primers for the Okazaki fragments made during discontinuous DNA replication.

PRIM1 Antibody - References

Stadlbauer F., et al. Eur. J. Biochem. 222:781-793(1994).

Cloutier S., et al. Genomics 43:398-401(1997).

Burkard T.R., et al. BMC Syst. Biol. 5:17-17(2011).