

# **PRIM2 Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17431c

## **Specification**

# PRIM2 Antibody (Center) - Product Information

Application WB,E
Primary Accession P49643

Other Accession <u>089044</u>, <u>NP 000938.2</u>

Reactivity
Predicted
Rat
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region
Human
Rat
Rabbit
Rabbit
Rabbit
Season
Rabbit IgG
Season
Rabbit IgG
Season
Rabbit IgG
Rabbit IgG
Rabbit IgG
Rabbit IgG
Rabbit IgG

# PRIM2 Antibody (Center) - Additional Information

#### **Gene ID 5558**

#### **Other Names**

DNA primase large subunit, 277-, DNA primase 58 kDa subunit, p58, PRIM2, PRIM2A

# Target/Specificity

This PRIM2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 317-345 amino acids from the Central region of human PRIM2.

## **Dilution**

WB~~1:1000

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

# **Precautions**

PRIM2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## PRIM2 Antibody (Center) - Protein Information

### Name PRIM2

Synonyms PRIM2A



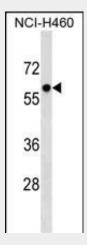
**Function** Regulatory subunit of the DNA primase complex and component of the DNA polymerase alpha complex (also known as the alpha DNA polymerase-primase complex) which play an essential role in the initiation of DNA synthesis (PubMed:9705292, PubMed:17893144, PubMed:25550159, PubMed:26975377). During 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, PubMed:25550159). Binds RNA:DNA duplex and coordinates the catalytic activities of PRIM1 and POLA2 during primase-to-polymerase switch.

#### PRIM2 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# PRIM2 Antibody (Center) - Images



PRIM2 Antibody (Center) (Cat. #AP17431c) western blot analysis in NCI-H460 cell line lysates (35ug/lane). This demonstrates the PRIM2 antibody detected the PRIM2 protein (arrow).

# PRIM2 Antibody (Center) - Background

The replication of DNA in eukaryotic cells is carried out by a complex chromosomal replication apparatus, in which DNA polymerase alpha and primase are two key enzymatic components. Primase, which is a heterodimer of a small subunit and a large





subunit, synthesizes small RNA primers for the Okazaki fragments made during discontinuous DNA replication. The protein encoded by this gene is the large, 58 kDa primase subunit. [provided by RefSeq].

# PRIM2 Antibody (Center) - References

Vaithiyalingam, S., et al. Proc. Natl. Acad. Sci. U.S.A. 107(31):13684-13689(2010) Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010): Weiner, B.E., et al. J. Biol. Chem. 282(46):33444-33451(2007) Rush, J., et al. Nat. Biotechnol. 23(1):94-101(2005) Mungall, A.J., et al. Nature 425(6960):805-811(2003)