

POLA2 Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17301c

Specification

POLA2 Antibody (Center) - Product Information

Application	WB,E
Primary Accession	Q14181
Other Accession	O89043 , Q58D13 , NP_002680.2
Reactivity	Human
Predicted	Bovine, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	65948
Antigen Region	212-240

POLA2 Antibody (Center) - Additional Information

Gene ID 23649

Other Names

DNA polymerase alpha subunit B, DNA polymerase alpha 70 kDa subunit, POLA2

Target/Specificity

This POLA2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 212-240 amino acids from the Central region of human POLA2.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

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

POLA2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

POLA2 Antibody (Center) - Protein Information

Name POLA2

Function Accessory subunit of the DNA polymerase alpha complex (also known as the alpha DNA polymerase-primase complex) which plays an essential role in the initiation of DNA synthesis (PubMed:[9705292](#)). 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 (By similarity). 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).

Cellular Location

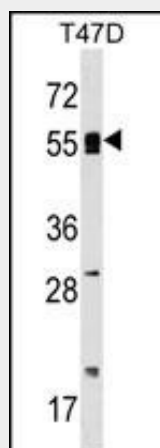
Nucleus.

POLA2 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 Cytometry](#)
- [Cell Culture](#)

POLA2 Antibody (Center) - Images



POLA2 Antibody (Center) (Cat. #AP17301c) western blot analysis in T47D cell line lysates (35ug/lane). This demonstrates the POLA2 antibody detected the POLA2 protein (arrow).

POLA2 Antibody (Center) - Background

POLA2 may play an essential role at the early stage of chromosomal DNA replication by coupling the polymerase alpha/primase complex to the cellular replication machinery (By similarity).

POLA2 Antibody (Center) - References

Michiels, S., et al. Carcinogenesis 30(5):763-768(2009)

Beausoleil, S.A., et al. Nat. Biotechnol. 24(10):1285-1292(2006)

Stelzl, U., et al. Cell 122(6):957-968(2005)

Beausoleil, S.A., et al. Proc. Natl. Acad. Sci. U.S.A. 101(33):12130-12135(2004)

Beausoleil, S.A., et al. Proc. Natl. Acad. Sci. U.S.A. 101(33):12130-12135(2004)