

## POLA2 Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP17301c

## **Specification**

## **POLA2 Antibody (Center) Blocking Peptide - Product Information**

Primary Accession

014181

## POLA2 Antibody (Center) Blocking Peptide - Additional Information

**Gene ID 23649** 

#### **Other Names**

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

#### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

### POLA2 Antibody (Center) Blocking Peptide - 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:<a href="http://www.uniprot.org/citations/9705292" target="\_blank">9705292</a>). 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) Blocking Peptide - Protocols



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

### • Blocking Peptides

# **POLA2 Antibody (Center) Blocking Peptide - Images**

## POLA2 Antibody (Center) Blocking Peptide - 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) Blocking Peptide - 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)