

PRIM2 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP17431c**Specification**

PRIM2 Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [P49643](#)**PRIM2 Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 5558**Other Names**

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

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.

PRIM2 Antibody (Center) Blocking Peptide - 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: [17893144](http://www.uniprot.org/citations/17893144), PubMed: [25550159](http://www.uniprot.org/citations/25550159), PubMed: [26975377](http://www.uniprot.org/citations/26975377), PubMed: [9705292](http://www.uniprot.org/citations/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 (PubMed: [17893144](http://www.uniprot.org/citations/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) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

PRIM2 Antibody (Center) Blocking Peptide - Images

PRIM2 Antibody (Center) Blocking Peptide - 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) Blocking Peptide - 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)