

POLR2D Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP17215c**Specification**

POLR2D Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [O15514](#)**POLR2D Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 5433**Other Names**

DNA-directed RNA polymerase II subunit RPB4, RNA polymerase II subunit B4, DNA-directed RNA polymerase II subunit D, RNA polymerase II 16 kDa subunit, RPB16, POLR2D

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.

POLR2D Antibody (Center) Blocking Peptide - Protein Information**Name** POLR2D**Function**

Core component of RNA polymerase II (Pol II), a DNA-dependent RNA polymerase which synthesizes mRNA precursors and many functional non-coding RNAs using the four ribonucleoside triphosphates as substrates. Pol II is the central component of the basal RNA polymerase II transcription machinery. It is composed of mobile elements that move relative to each other. POLR2D/RPB4 is part of a subcomplex with POLR2G/RPB7 that binds to a pocket formed by POLR2A/RPB1, POLR2B/RPB2 and POLR2F/RPABC2 at the base of the clamp element. The POLR2D/RPB4- POLR2G/RPB7 subcomplex seems to lock the clamp via POLR2G/RPB7 in the closed conformation thus preventing double-stranded DNA to enter the active site cleft. The POLR2D/RPB4-POLR2G/RPB7 subcomplex binds single- stranded DNA and RNA.

Cellular Location

Nucleus.

POLR2D Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

POLR2D Antibody (Center) Blocking Peptide - Images

POLR2D Antibody (Center) Blocking Peptide - Background

This gene encodes the fourth largest subunit of RNA polymerase II, the polymerase responsible for synthesizing messenger RNA in eukaryotes. In yeast, this polymerase subunit is associated with the polymerase under suboptimal growth conditions and may have a stress protective role. A sequence for a ribosomal pseudogene is contained within the 3' untranslated region of the transcript from this gene.

POLR2D Antibody (Center) Blocking Peptide - References

Michiels, S., et al. Carcinogenesis 30(5):763-768(2009) Meka, H., et al. Nucleic Acids Res. 33(19):6435-6444(2005) Zhou, M., et al. Proc. Natl. Acad. Sci. U.S.A. 100(22):12666-12671(2003) Kaehlcke, K., et al. Mol. Cell 12(1):167-176(2003) Shilatifard, A., et al. Annu. Rev. Biochem. 72, 693-715 (2003) :