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POLR2D Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP17215c

Specification

POLR2D Antibody (Center) Blocking Peptide - Product Information

Primary 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

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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 RNApolymerase II, the polymerase responsible for synthesizingmessenger RNA in eukaryotes. In yeast, this polymerase subunit isassociated with the polymerase under suboptimal growth conditionsand may have a stress protective role. A sequence for a ribosomalpseudogene is contained within the 3' untranslated region of thetranscript 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) :