

Catalog # BP12458b

POLR2G Antibody (C-term) Blocking peptide Synthetic peptide

Specification

POLR2G Antibody (C-term) Blocking peptide - Product Information

Primary Accession

<u>P62487</u>

POLR2G Antibody (C-term) Blocking peptide - Additional Information

Gene ID 5436

Other Names

DNA-directed RNA polymerase II subunit RPB7, RNA polymerase II subunit B7, DNA-directed RNA polymerase II subunit G, RNA polymerase II 19 kDa subunit, RPB19, POLR2G, RPB7

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.

POLR2G Antibody (C-term) Blocking peptide - Protein Information

Name POLR2G

Synonyms RPB7

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. POLR2G/RPB7 is part of a subcomplex with POLR2D/RPB4 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.



POLR2G Antibody (C-term) Blocking peptide - Protocols

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

Blocking Peptides

POLR2G Antibody (C-term) Blocking peptide - Images

POLR2G Antibody (C-term) Blocking peptide - Background

This gene encodes the seventh largest subunit of RNApolymerase II, the polymerase responsible for synthesizingmessenger RNA in eukaryotes. The protein functions in transcriptioninitiation, and is also thought to help stabilize transcribingpolyermase molecules during elongation.

POLR2G Antibody (C-term) Blocking peptide - References

Cojocaru, M., et al. Biochem. J. 409(1):139-147(2008)Ujvari, A., et al. Nat. Struct. Mol. Biol. 13(1):49-54(2006)Meka, H., et al. Nucleic Acids Res. 33(19):6435-6444(2005)Lehner, B., et al. Genomics 83(1):153-167(2004)Zhou, M., et al. Proc. Natl. Acad. Sci. U.S.A. 100(22):12666-12671(2003)