

**POLR2G Blocking Peptide (C-term)**

Synthetic peptide

Catalog # BP20221b

**Specification**

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**POLR2G Blocking Peptide (C-term) - Product Information**

Primary Accession

[P62487](#)

Other Accession

[P62489](#), [P62488](#), [Q7ZW41](#), [Q5E9B8](#),  
[NP\\_002687.1](#)**POLR2G Blocking Peptide (C-term) - 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

**Target/Specificity**

The synthetic peptide sequence is selected from aa 140-154 of HUMAN POLR2G

**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 Blocking Peptide (C-term) - 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 Blocking Peptide (C-term) - Protocols**

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

- [Blocking Peptides](#)

**POLR2G Blocking Peptide (C-term) - Images****POLR2G Blocking Peptide (C-term) - Background**

This gene encodes the seventh largest subunit of RNA polymerase II, the polymerase responsible for synthesizing messenger RNA in eukaryotes. The protein functions in transcription initiation, and is also thought to help stabilize transcribing polymerase molecules during elongation.

**POLR2G Blocking Peptide (C-term) - 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)