

Goat Anti-POLR2G Antibody
Peptide-affinity purified goat antibody
Catalog # AF1848a**Specification**

Goat Anti-POLR2G Antibody - Product Information

Application	WB, E
Primary Accession	P62487
Other Accession	NP_002687 , 5436
Reactivity	Human
Predicted	Mouse, Rat, Sheep
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	19294

Goat Anti-POLR2G Antibody - 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

Dilution

WB~~1:1000

E~~N/A

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-POLR2G Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-POLR2G Antibody - 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.

Goat Anti-POLR2G Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Goat Anti-POLR2G Antibody - Images



Approx 21kDa band observed in Human Brain (Cerebellum) lysates (calculated MW of 19.3kDa according to NP_002687.1). Recommended concentration: 1-3 µg/ml.

Goat Anti-POLR2G Antibody - 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.

Goat Anti-POLR2G Antibody - References

Defining the human deubiquitinating enzyme interaction landscape. Sowa ME, et al. Cell, 2009 Jul 23. PMID 19615732.

Genomic location of the human RNA polymerase II general machinery: evidence for a role of TFIIF and Rpb7 at both early and late stages of transcription. Cojocaru M, et al. Biochem J, 2008 Jan 1. PMID 17848138.

Systematic analysis of the protein interaction network for the human transcription machinery reveals the identity of the 7SK capping enzyme. Jeronimo C, et al. Mol Cell, 2007 Jul 20. PMID 17643375.

Will diverse Tat interactions lead to novel antiretroviral drug targets? Harrich D, et al. Curr Drug Targets, 2006 Dec. PMID 17168834.

The regulation of HIV-1 transcription: molecular targets for chemotherapeutic intervention. Stevens M, et al. Med Res Rev, 2006 Sep. PMID 16838299.