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POLR2G Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12458b

Product Information

Application	WB, FC, E
Primary Accession	P62487
Other Accession	P62489, P62488, Q7ZW41, Q5E9B8, NP_002687.1
Reactivity	Human
Predicted	Bovine, Zebrafish, Mouse, Rat, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB31966
Calculated MW	19294
Antigen Region	126-153

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	This POLR2G antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 126-153 amino acids from the C-terminal region of human POLR2G.
Dilution	WB~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	POLR2G Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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.

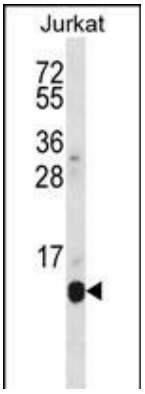
Background

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 polyermase molecules during elongation.

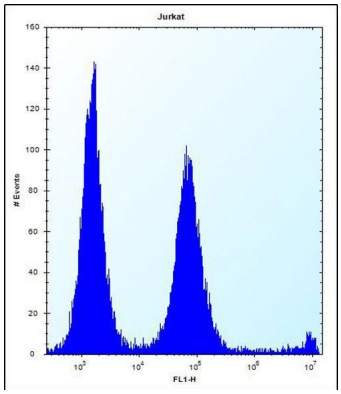
References

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)

Images



POLR2G Antibody (C-term) (Cat. #AP12458b) western blot analysis in Jurkat cell line lysates (35ug/lane).This demonstrates the POLR2G antibody detected the POLR2G protein (arrow).



POLR2G Antibody (C-term) (Cat. #AP12458b) flow cytometric analysis of Jurkat cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated donkey-anti-rabbit secondary antibodies were used for the analysis.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.