

**DATASHEET**

**POLR2D Rabbit Polyclonal Antibody**

CAT. NO. APA13628

**KEY FEATURES**

Target	POLR2D	Source / Host	Rabbit
Reactivity	Human, Mouse	Clonality	Polyclonal
Applications	WB, IF/ICC	Conjugation	Unconjugated
Form / Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.		Storage at -20°C

**BACKGROUND**

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.

**APPLICATION**

To ensure optimal assay performance, AREX recommends conducting reagent titration tailored to each testing system for optimal detection results.

WB	1:500 - 1:2000
IF/ICC	1:10 - 1:100

\*Results are sample-specific. Please refer to your local assay conditions and test parameters for reference.

**PRODUCT OVERVIEW**

Description	Rabbit polyclonal antibody to POLR2D
Specificity	Recognizes endogenous levels of POLR2D protein.
Antibody Type	Primary antibody
Immunogen	Recombinant fusion protein of human POLR2D
Purification	The antibody was purified by immunogen affinity chromatography.
Molecular Weight	Predicted: 16 kD; Observed: 16 kD
Form/Buffer	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Alternative 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
Gene Symbol	POLR2D
Entrez Gene	5433(Human); 69241(Mouse)
SwissProt	O15514(Human); Q9D7M8(Mouse)

\*AREX continuously optimizes our products. Webpage content may not reflect the latest updates. For inquiries, please contact [info@arexbio.com](mailto:info@arexbio.com) or your local distributor.

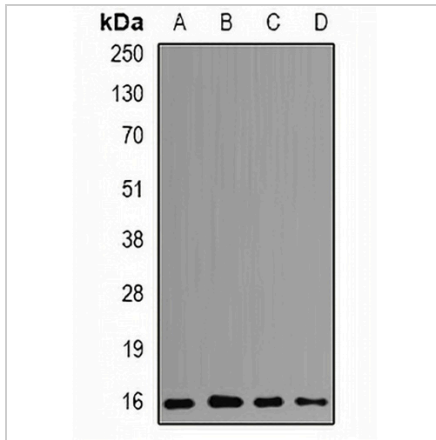
\*Clone Number, Reactivity, Source/Host and Clonality can be found in the product name and Key Features section above.

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**DATA**



Western blot analysis of POLR2D expression in MCF7 (A), SW620 (B), HepG2 (C), mouse spleen (D) whole cell lysates. (Predicted band size: 16 kD; Observed band size: 16 kD)



Immunofluorescent analysis of POLR2D staining in SW620 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

**STORAGE**

Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.

**NOTE**

For Research Use Only. Not for diagnostic, therapeutics, prophylactic or in vivo use.