

Datasheet for 600-401-HB3S**POL II Antibody****Overview**

Description:	Anti-POL II (RABBIT) Antibody - 600-401-HB3S
Item No.:	600-401-HB3S
Size:	25 µL
Applications:	ChIP, ELISA
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	Anti-POL II antibody will detect DNA-directed RNA polymerase II subunit RPB1, an enzyme composed of 12 subunits, which initiates the transcription of RNA from DNA, synthesizing many functional non-coding RNAs as well as messenger RNA precursors. POL II encodes a core element of the transcription machinery. Malfunctioning of the Pol II gene can cause diseases such as Cockayne Syndrome B and La Crosse Encephalitis. Anti-POL II Antibody is useful for researchers interested in DNA damage and repair studies.
Synonyms:	RPO2, DNA-directed RNA polymerase II subunit A, DNA-directed RNA polymerase III largest subunit, RNA-directed RNA polymerase II subunit RPB1, RPB1, POLR2A,
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	POLR2A
Reactivity:	Human
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-POL II antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to the n-terminal portion of human POL II conjugated to Keyhole Limpet Hemocyanin (KLH).

Purity/Specificity: This affinity purified antibody is directed against human POL II. This product was affinity purified from monospecific antiserum by immunoaffinity purification. Blast analysis of the sequence of the immunogen shows 100% identity with mouse and Chinese hamster.

Relevant Links:

- [GeneID - 5430](#)
- [UniProtKB - P24928](#)
- [NCBI - NP_000928.1](#)

Application Details

Tested Applications:	ChIP, ELISA
Application Note:	Anti-POL II antibody has been tested in ChIP and ELISA, and is likely suitable for western blotting and immunofluorescence assays. Positive controls used in ChIP were EGF stimulated NR4A1 5', NR4A1 3' and FOS 3'. The negative control was total rabbit IgG.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ChIP:	User Optimized
ELISA:	1:10,000 - 1:50,000
IF:	User Optimized
WB:	1:1000

Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/ml by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

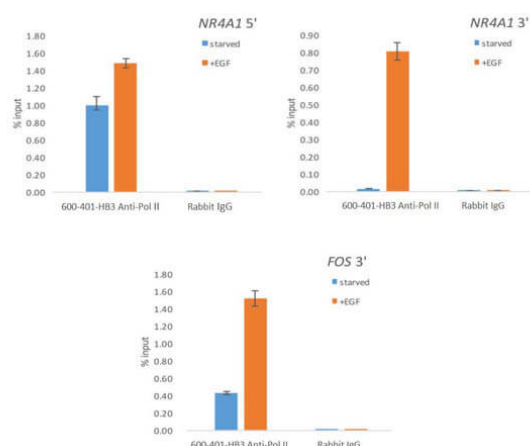
Shipping & Handling

Shipping Condition: Dry Ice

Storage Condition: Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.

Expiration: Expiration date is one (1) year from date of receipt.

Images



ChIP

Chromatin Immunoprecipitation of Rabbit Anti-Pol II Antibody. Chromatin from three million formaldehyde cross-linked HeLa cells (total volume 1.0mL) was used with 2.5µg of Anti-Pol II was used to IP DNA to test in three different conditions; NR4A1 5', NR4A1 3' and FOS 3' starved and EGF stimulated with total rabbit IgG used as control.

References

- Serresi M et al. Functional antagonism of chromatin modulators regulates epithelial-mesenchymal transition. *Sci Adv.* (2021)

Disclaimer

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