

Datasheet: AHP3100

Description:	RABBIT ANTI HUMAN RNA POL II CTD (pThr4)
Specificity:	RNA POL II CTD (pThr4)
Other names:	RPB1
Format:	Purified
<b>Product Type:</b>	Polyclonal Antibody
Isotype:	Polyclonal IgG
Quantity:	0.1 mg

## **Product Details**

## **Applications**

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.biorad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Western Blotting				1 μg/ml - 2 μg/ml

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Species Cross			
Reactivity			

**Target Species** 

Human

Based on sequence similarity, is expected to react with:Broad

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

## **Product Form**

Purified IgG - liquid

Antiserum Preparation Antiserum to human RNA pol II CTD (pThr4) was raised by repeated immunization of rabbits with highly purified antigen. Purified IgG was prepared from whole serum by affinity chromatography on Protein A.

Buffer Solution	Phosphate buffered saline
Preservative	0.035% Sodium Azide (NaN <sub>3</sub> )
Stabilisers	30% Glycerol

Carrier Free	Yes		
Immunogen	A peptide containing the RNA pol II C-terminal sequence phosphorylated at threonine 4		
External Database Links	UniProt: P24928 Related reagents  Entrez Gene: 5430 POLR2A Related reagents		
Synonyms	POLR2		
Specificity	Rabbit anti Human RNA pol II CTD (pThr4) antibody recognizes RNA polymerase II, also known as RNAP II and pol II, when phosphorylated at threonine 4 of the carboxylterminal repeat domain.		
	RNA pol II is a 550 kDa enzyme complex made up of 12 subunits that transcribes DNA into precursors of messenger RNA (mRNA), snRNA, and microRNA (Kornburg, 1999) (Sims et al. 2004). The carboxyl-terminal repeat domain (CTD) of RNA pol II is reversibly phosphorylated in during the transcription cycle (Phatnani and Greenleaf, 2006). Phosphorylation of the CTD of RNA pol II at threonine 4 has been shown to facilitate histone mRNA 3' end processing (Hsin et al. 2011). Phosphorylation of the carboxyl-terminal repeat domain of RNA polymerase II at threonine 4 occurs at the 3' end of most human genes and is necessary for transcription elongation (Hintermair et al. 2012).		
	Wide species cross-reactivity is expected from Rabbit anti Human RNA pol II CTD (pThr4) based on sequence.		
Storage	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.		
	Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. Should this product contain a precipitate we recommend microcentrifugation before use.		
Guarantee	12 months from date of despatch		
Health And Safety Information	Material Safety Datasheet documentation #10049 available at: <a href="https://www.bio-rad-antibodies.com/SDS/AHP3100">https://www.bio-rad-antibodies.com/SDS/AHP3100</a> 10049		
Regulatory	For research purposes only		

# **Related Products**

## **Recommended Secondary Antibodies**

Sheep Anti Rabbit IgG (STAR34...) FITC
Sheep Anti Rabbit IgG (STAR35...) RPE
Goat Anti Rabbit IgG (H/L) (STAR124...) HRP
Goat Anti Rabbit IgG (Fc) (STAR121...) Biotin, FITC, HRP

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 Worldwide
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 Fax: +1 919 878 3751
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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M394922:220218'

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