

Datasheet: MCA6374

Description:	MOUSE ANTI HUMAN RNA POL II CTD (pSer2/pSer5)		
Specificity:	RNA POL II CTD (pSer2/pSer5)		
Other names:	RPB1		
Format:	Purified		
Product Type:	Monoclonal Antibody		
Clone:	1A12G10		
Isotype:	lgG1		
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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Western Blotting	•			0.5 μl/ml - 2 μl/ml
Immunofluorescence	•			5 μg/ml
Chromatin				5 μg per ChIP - 10 μg per
Immunoprecipitation	_			ChIP

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.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.035% Sodium Azide (NaN <sub>3</sub> ) 30% Glycerol
Carrier Free	Yes

Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	A synthetic peptide containing phosphorylated serine 2 and phosphorylated serine 5 of the CTD of human RNA polymerase II
External Database Links	UniProt: P24928 Related reagents  Entrez Gene: 5430 POLR2A Related reagents
Synonyms	POLR2
Specificity	Mouse anti Human RNA pol II CTD (pSer2/pSer5) antibody, clone 1A12G10 recognizes RNA polymerase II, also known as RNAP II and pol II, when phosphorylated at serine 2 or serine 5 of the carboxyl-terminal 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). Repeats phosphorylated on both serine 2 and serine 5 are required for optimal binding of the SRI domain of the methyl transerase SET2 to RNA pol II (Rebehmed et al. 2014).  Wide species cross-reactivity is expected from Mouse anti Human RNA pol II CTD (pSer2/pSer5), clone 1A12G10 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. 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/MCA6374">https://www.bio-rad-antibodies.com/SDS/MCA6374</a> 10049
Regulatory	For research purposes only

# **Related Products**

## **Recommended Secondary Antibodies**

Goat Anti Mouse IgG (STAR77...) HRP
Rabbit Anti Mouse IgG (STAR12...) RPE

Rabbit Anti Mouse IgG (STAR8...) DyLight®800

Goat Anti Mouse IgG (STAR76...)

RPE
Goat Anti Mouse IgG (STAR70...)

FITC

Goat Anti Mouse IgG IgA IgM (STAR87...) Alk. Phos., HRP

Rabbit Anti Mouse IgG (STAR13...) HRP

Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP

Rabbit Anti Mouse IgG (STAR9...) FITC

Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®550,

DyLight®650, DyLight®680, DyLight®800,

FITC, HRP

## **Recommended Negative Controls**

#### MOUSE IgG1 NEGATIVE CONTROL (MCA928)

 North & South
 Tel: +1 800 265 7376
 Worldwide
 Tel: +44 (0)1865 852 700
 Europe
 Tel: +49 (0) 89 8090 95 21

 America
 Fax: +1 919 878 3751
 Fax: +44 (0)1865 852 739
 Fax: +49 (0) 89 8090 95 50

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M394790:220218'

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