

Datasheet: MCA6380

BATCH NUMBER 160847

Description:	RAT ANTI HUMAN RNA POL II CTD (pSer7)
Specificity:	RNA POL II CTD (pSer7)
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	3D4A12
Isotype:	IgG2b
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.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Western Blotting	▪			0.5 ug/ml - 2 ug/ml
Immunofluorescence	▪			2 ug/ml - 10 ug/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.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative	0.035% Sodium Azide (NaN ₃)
Stabilisers	30% Glycerol
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml

Immunogen A peptide containing the RNA pol II CTD sequence phosphorylated at serine 7

External Database

Links

UniProt:

[P24928](#) [Related reagents](#)

Entrez Gene:

[5430](#) POLR2A [Related reagents](#)

Synonyms

POLR2

Specificity

Rat anti Human RNA pol II CTD (pSer7) antibody, clone 3D4A12 recognizes RNA polymerase II, also known as RNAP II and pol II, when phosphorylated at serine 7 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](#)). Phosphorylation of the CTD of RNA pol II at serine 7 is found on all pol II-transcribed genes in mammalian cells, however, this event is only essential for expression of a sub-class of genes encoding small nuclear (sn) RNAs. It is thought that phosphorylation of the CTD of RNA pol II at serine 7 facilitates transcription of these genes and 3' end processing of the transcripts, through recruitment of the RPAP2 phosphatase and the snRNA gene-specific Integrator complex ([Egloff, 2012](#)).

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: <https://www.bio-rad-antibodies.com/SDS/MCA6380>
10049

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Rat IgG (STAR69...) [FITC](#)

Goat Anti Rat IgG (STAR73...) [RPE](#)

Rabbit Anti Rat IgG (STAR17...) [FITC](#)

Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin
Goat Anti Rat IgG (STAR72...)	HRP
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®650 , DyLight®800
Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR16...)	DyLight®800

Recommended Negative Controls

[RAT IgG2b NEGATIVE CONTROL \(MCA6006GA\)](#)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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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
'M394847:220218'

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