

Datasheet: MCA6378

BATCH NUMBER 160848

Description:	RAT ANTI HUMAN RNA POL II CTD (pSer5)
Specificity:	RNA POL II CTD (pSer5)
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	1H4B6
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	▪			4 ug/ml - 6 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 5

External Database

Links

UniProt:

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

Entrez Gene:

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

Synonyms

POLR2

Specificity

Rat anti Human RNA pol II CTD (pSer5) antibody, clone 1H4B6 recognizes RNA polymerase II, also known as RNAP II and pol II, when phosphorylated at 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 3rd et al. 2004](#)). The carboxyl-terminal repeat domain (CTD) of RNA pol II is reversibly phosphorylated in during the transcription cycle. It is thought that phosphorylation of the CTD of RNA pol II at serine 5 facilitates the formation of 3' ends of messages ([Phatnani and Greenleaf, 2006](#)). Phosphorylation of serine 5 of the carboxyl-terminal repeat domain of RNA pol II facilitates the recruitment of the capping enzyme ([Egloff and Murphy, 2008](#)).

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/MCA6378>
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 \(MCA6006GA\)](#)

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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

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