

Product Datasheet

RNA Polymerase II/POLR2A Antibody NB200-598SS

Unit Size: 0.025 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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NB200-598SS

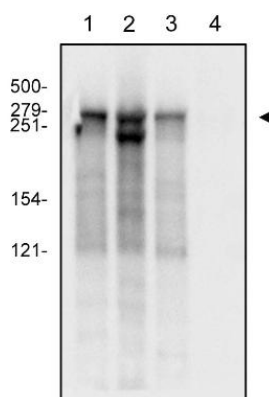
RNA Polymerase II/POLR2A Antibody (4H8)

Product Information	
Unit Size	0.025 ml
Concentration	1 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	4H8
Preservative	No Preservative
Isotype	IgG1
Purity	Protein G purified
Buffer	PBS
Target Molecular Weight	217 kDa
Product Description	
Host	Mouse
Gene ID	5430
Gene Symbol	POLR2A
Species	Human, Mouse, Yeast, Primate (Negative)
Species Reactivity	Human, <i>S. cerevisiae</i> (Yeast), Mouse. Expected to cross-react with <i>Drosophila melanogaster</i> , hamster, <i>S. pombe</i> , and <i>Arabidopsis thaliana</i> due to sequence homology - all of these species contain at least one or more 100% identical repeats. Does not cross react with monkey.
Specificity/Sensitivity	This antibody recognizes the C-terminal repeat of the largest subunit of RNA polymerase II. It recognizes both unphosphorylated and phosphorylated forms.
Immunogen	10 repeats of synthetic peptide YSPTSPS using chemically synthesized phospho-Ser 5 YSPTSpPS (Human). [UniProt# P24928]
Product Application Details	
Applications	Western Blot, Chromatin Immunoprecipitation, ELISA, Flow Cytometry, Immunocytochemistry/Immunofluorescence, Immunoprecipitation
Recommended Dilutions	Chromatin Immunoprecipitation 1:10-1:500, ELISA 1:100-1:2000, Flow Cytometry 1 ug per million cells, Immunocytochemistry/Immunofluorescence 1:100-1:1000, Immunoprecipitation 1:10-1:500, Western Blot 1-2 ug/ml
Application Notes	This RNA polymerase II Antibody (4H8) is useful for Chromatin Immunoprecipitation, Immunocytochemistry/Immunofluorescence, ELISA, Immunoprecipitation and Western blot. In WB a band can be seen at approximately 217 kDa. Optimal dilutions/concentrations should be determined by the end user.

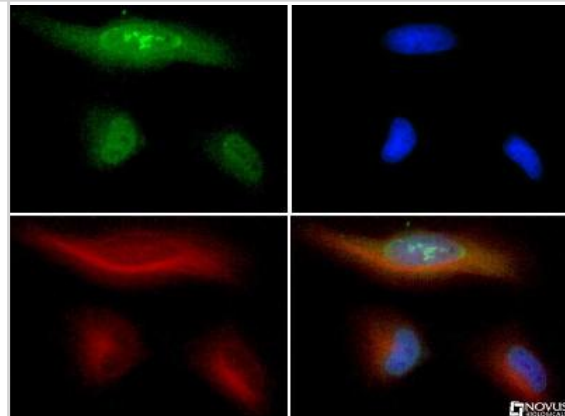


Images

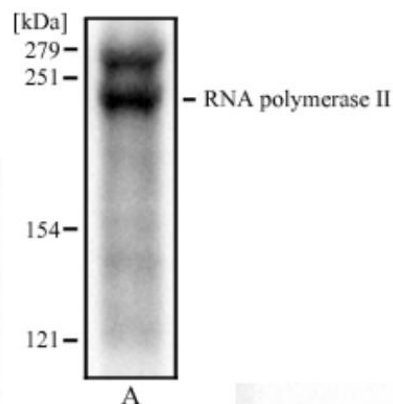
Western Blot: RNA polymerase II Antibody (4H8) [NB200-598] - Whole cell protein from HeLa (lane 1), MCF7 (lane 2), NIH-3T3 (lane 3) and Cos7 (lane 4) were separated by SDS-PAGE on a 6% gel, transferred to PVDF and probed with 2 ug/ml NB200-598. RNA Pol II reactivity (arrowhead) is observed in HeLa, MCF and 3T3 cells.



Immunocytochemistry/Immunofluorescence: RNA polymerase II Antibody (4H8) [NB200-598] - RNA polymerase II Antibody (4H8) [NB200-598] - RNA polymerase II antibody was tested in HeLa cells with FITC (green). Nuclei and alpha-tubulin were counterstained with Dapi (blue) and Dylight 550 (red).



Western Blot: RNA polymerase II Antibody (4H8) [NB200-598] - Western blot analysis of MCF7 cell lysata (A) using RNA polymerase II antibody at 2 ug/ml.



Publications

Chan EA, Teng G, Corbett E et al. Peripheral subnuclear positioning suppresses Tcrb recombination and segregates Tcrb alleles from RAG2. *Proc Natl Acad Sci U S A*. 2013 Nov 26 [PMID: 24218622] (ICC/IF, Mouse)

Kato H, Okazaki K, Iida T et al. Spt6 prevents transcription-coupled loss of posttranslationally modified histone H3. *Sci Rep* 2013 Jul 15 [PMID: 23851719] (ChIP, Yeast)

Cheng J, Torkamani A, Peng Y et al. Plasma membrane associated transcription of cytoplasmic DNA *Proc Natl Acad Sci U S A* 2012 Jun 18 [PMID: 22711823] (WB, ICC/IF, Human)

Walsh HE, Shupnik MA. Proteasome regulation of dynamic transcription factor occupancy on the GnRH-stimulated luteinizing hormone beta-subunit promoter. *Mol Endocrinol*;23(2):237-50. 2009 Feb. [PMID: 19095772] (ChIP, Human)

Reid J, Svejstrup JQ. DNA damage-induced Def1-RNA polymerase II interaction and Def1 requirement for polymerase ubiquitylation in vitro. *J Biol Chem*;279(29):29875-8. 2004 Jul 16. [PMID: 15166235] (WB, IP, Yeast)

Procedures

Western Blot Protocol Specific for NB200-598 (NB200-598)

1. Perform SDS-PAGE on samples to be analyzed, loading 30 ug of total protein per lane.
2. Transfer proteins to membrane according to the instructions provided by the manufacturer of the membrane and transfer apparatus.
3. Stain according to standard Ponceau S procedure (or similar product) to assess transfer success, and mark molecular weight standards where appropriate.
4. Rinse the blot.
5. Block the membrane using standard blocking buffer for at least 1 hour.
6. Wash the membrane in wash buffer three times for 10 minutes each.
7. Dilute primary antibody in blocking buffer and incubate 1 hour at room temperature.
8. Wash the membrane in wash buffer three times for 10 minutes each.
9. Apply the diluted HRP conjugated secondary antibody in blocking buffer (as per manufacturers instructions) and incubate 1 hour at room temperature.
10. Wash the blot in wash buffer three times for 10 minutes each (this step can be repeated as required to reduce background).
11. Apply the detection reagent of choice in accordance with the manufacturers instructions.

**Note: Tween-20 can be added to the blocking or antibody dilution buffer at a final concentration of 0.05-0.2%.

*The above information is only intended as a guide. The researcher should determine what protocol best meets their needs. Please follow safe laboratory procedures.





Novus Biologicals USA

8100 Southpark Way, A-8
Littleton, CO 80120
USA
Phone: 303.730.1950
Toll Free: 1.888.506.6887
Fax: 303.730.1966
novus@novusbio.com

Novus Biologicals Canada

461 North Service Road West, Unit B37
Oakville, ON L6M 2V5
Canada
Phone: 905.827.6400
Toll Free: 855.668.8722
Fax: 905.827.6402
canada@novusbio.com

Novus Biologicals Europe

19 Barton Lane
Abingdon Science Park
Abingdon, OX14 3NB, United Kingdom
Phone: (44) (0) 1235 529449
Free Phone: 0800 37 34 15
Fax: (44) (0) 1235 533420
info@bio-techne.com

General Contact Information

www.novusbio.com
Technical Support: technical@novusbio.com
Orders: orders@novusbio.com
General: novus@novusbio.com

Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

For more information on our guarantee, please visit www.novusbio.com/guarantee.

