

Datasheet for ABIN6655366
anti-POLR2A/RPB1 antibody (pSer2)

7 Images

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Overview

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|----------------------|---|
| Quantity: | 50 µg |
| Target: | POLR2A/RPB1 (POLR2A) |
| Binding Specificity: | pSer2 |
| Reactivity: | Human |
| Host: | Mouse |
| Clonality: | Monoclonal |
| Conjugate: | This POLR2A/RPB1 antibody is un-conjugated |
| Application: | Western Blotting (WB), ELISA, Chromatin Immunoprecipitation (ChIP), Fluorescence Microscopy (FM), Cleavage Under Targets and Release Using Nuclease (CUT&RUN) |

Product Details

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| Immunogen: | Immunogen: Anti-Pol II S2p Antibody was produced in mice by repeated immunization with the YSPTSPS repeat in the B1 subunit of RNA polymerase II phosphorylated at Ser2 of the repeated sequence. Immunogen Type: Peptide |
| Isotype: | IgG1 |
| Purification: | Anti-Pol II pS2 Antibody was purified by Protein A chromatography. This antibody is specific for Pol II protein phosphorylated Ser2. Cross-reactivity with Pol II pS2 from other sources has not been determined. |

Target Details

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| Target: | POLR2A/RPB1 (POLR2A) |
| Alternative Name: | Pol II (POLR2A Products) |
| Background: | <p>Synonyms: DNA-directed RNA polymerase II subunit RPB1, RNA polymerase II subunit B1, DNA directed RNA polymerase II subunit A, DNA-directed RNA polymerase III largest subunit, RNA-directed RNA polymerase II subunit RPB1</p> <p>Background: RNA polymerase II (pol II) is a key enzyme in the regulation and control of gene transcription. It is able to unwind the DNA double helix, synthesize RNA, and proofread the result. Pol II is a complex enzyme, consisting of 12 subunits, of which the B1 subunit (UniProt/Swiss-Prot entry P24928) is the largest. Together with the second largest subunit, B1 forms the catalytic core of the RNA polymerase II transcription machinery. Anti-Pol II S2p Antibody is ideal for research in Gene Expression, Transcription, and Genetics.</p> <p>Gene Name: POLR2A</p> |
| Gene ID: | 5430 |
| NCBI Accession: | NP_000928 |
| UniProt: | P24928 |
| Pathways: | Regulatory RNA Pathways |

Application Details

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| Application Notes: | <p>The rabbit anti-PolIII (pSer2) antibody ABIN6655366 is suitable for use in ChIP, CUT&RUN, ELISA, immunofluorescence microscopy, and western blot. Specific conditions for each assay should be optimized by the end user. Expect a band of approximately 225 kDa in western blot in the appropriate cell lysate or extract. General ABIN6655366 dilution recommendations for different applications are as follows:</p> <ul style="list-style-type: none">• ChIP: 1 µg/ChIP• ELISA: 1:3,000• IF: 1:500• WB: 1:1,000• CUT&RUN: 1:100 |
| Restrictions: | For Research Use only |

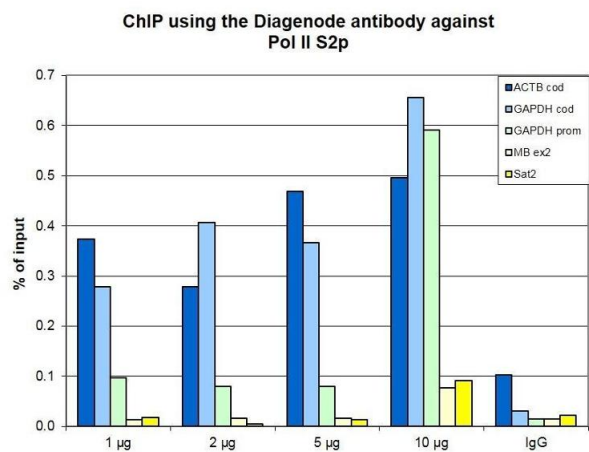
Handling

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| Format: | Liquid |
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Handling

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|--------------------|---|
| Buffer: | Buffer: 0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2 0.02 % (w/v) Sodium Azide Stabilizer: None |
| Preservative: | Sodium azide |
| Precaution of Use: | This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only. |
| Storage: | RT,4 °C,-20 °C |
| Storage Comment: | Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use. |

Images

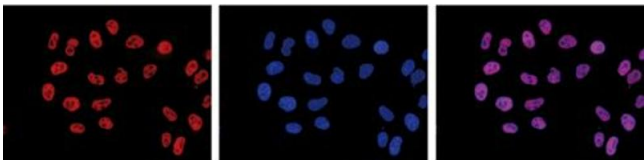


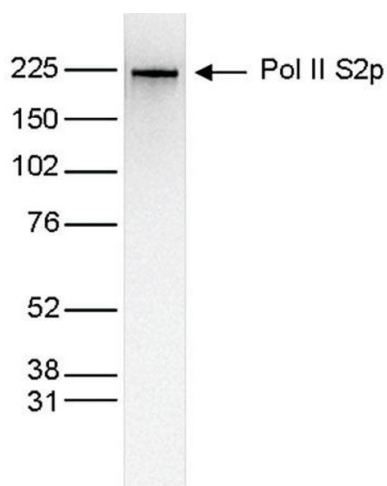
Chromatin Immunoprecipitation

Image 1. Chromatin Immunoprecipitation for Mouse Anti-Pol II S2p Antibody. ChIP was performed using sheared chromatin from 1 million HeLa cells. A titration consisting of 1, 2, 5 and 10 µg of antibody per experiment was analyzed. IgG, exon 2 of the inactive myoglobin gene, and Sat2 satellite was used as a negative IP control, GAPDH and ACTB genes, used as positive controls. Figure shows the recovery, expressed as a % of input (the relative amount of IP DNA compared to input DNA after qPCR analysis).

Immunofluorescence

Image 2. Immunofluorescence Microscopy of anti-Pol II S2p antibody Immunofluorescence Microscopy results of Mouse anti-Pol II S2p antibody. Tissue: HeLa cells. Fixation: methanol. Block: PBS/TX-100 containing 5% normal goat serum and 1% BSA. Primary antibody: Pol II S2p antibody at 1:500 for 1 hr at RT (left). Secondary antibody: anti-Mouse Alexa594 secondary antibody at 1:10,000 for 45 min at RT. Staining: Pol II S2p antibody as red fluorescent signal (left),





DAPI blue (middle), merge of the two staining (right).

Western Blotting

Image 3. Western Blot of anti-Pol II S2p antibody Western Blot results of Mouse anti-Pol II S2p antibody. Lane 1: HeLa Nuclear Extracts 25µg. Primary antibody: Mouse anti-Pol II S2p antibody at 1:1000 overnight at 4°C. Secondary antibody: Peroxidase anti-mouse secondary antibody at 1:10,000 for 45 min at RT. Block: TBS-Tween containing 5% BLOTTO. Predicted/Observed size: ~217 kDa for Mouse Pol II S2p.

Please check the [product details page](#) for more images. Overall 7 images are available for ABIN6655366.