

AP1354

Leader in Biomolecular Solutions for Life Science



Phospho-Rpb1 CTD-S2/S5 Rabbit mAb

Catalog No.: AP1354

Recombinant

Basic Information

Observed MW

270kDa/

Calculated MW

217kDa

Category

SMab Recombinant Monoclonal
Antibody

Applications

WB,IP,ChIP,ELISA,CUT&Tag

Cross-Reactivity

Human,Rat

CloneNo number

ARC54959

Background

This gene encodes the largest subunit of RNA polymerase II, the polymerase responsible for synthesizing messenger RNA in eukaryotes. The product of this gene contains a carboxy terminal domain composed of heptapeptide repeats that are essential for polymerase activity. These repeats contain serine and threonine residues that are phosphorylated in actively transcribing RNA polymerase. In addition, this subunit, in combination with several other polymerase subunits, forms the DNA binding domain of the polymerase, a groove in which the DNA template is transcribed into RNA.

Recommended Dilutions

WB 1:1000 - 1:5000

IP 0.5µg-4µg antibody for
200µg-400µg extracts
of whole cells

ELISA Recommended starting
concentration is 1
µg/mL. Please optimize
the concentration
based on your specific
assay requirements.

ChIP 5µg antibody for
10µg-15µg of
Chromatin

CUT&Tag 10⁵ cells /1 µg

Immunogen Information

Gene ID
5430

Swiss Prot
P24928

Immunogen

Synthetic peptide. This information is considered to be commercially sensitive.

Synonyms

RPB1; RPO2; POLR2; POLRA; RPBh1; RPOL2; NEDHIB; RpILS; hsRPB1; hRPB220;
Phospho-POLR2A-S2/S5

Product Information

Source
Rabbit

Isotype
IgG

Purification
Affinity purification

Storage

Store at -20°C. Avoid freeze / thaw cycles.

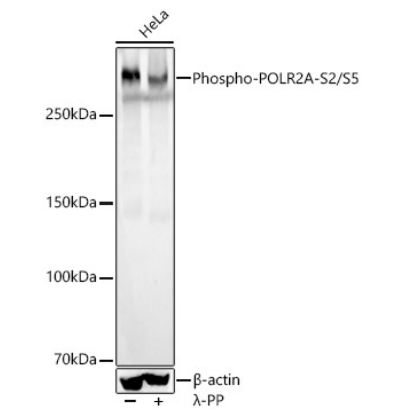
Buffer: PBS with 0.09% Sodium azide,0.05% BSA,50% glycerol,pH7.3.

Contact

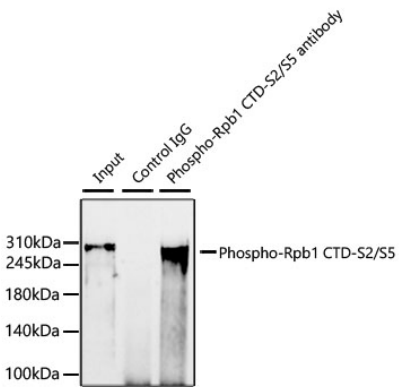


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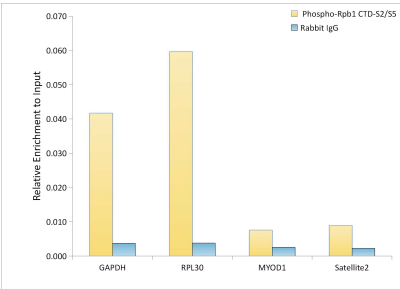
Validation Data



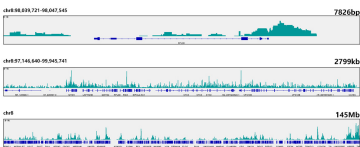
Western blot analysis of various lysates, using Phospho-POLR2A-S2/S5 Rabbit mAb (AP1354) at 1:2000 dilution. HeLa cells were treated by λ-PP mixed solution (1ul) at 30°C for 30 minutes. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25μg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (RM00020). Exposure time: 4s.



Immunoprecipitation analysis of 300 μg extracts of HeLa cells using 3 μg Phospho-Rpb1 CTD-S2/S5 Rabbit mAb (AP1354). Western blot was performed from the immunoprecipitate using Phospho-Rpb1 CTD-S2/S5 Rabbit mAb antibody (AP1354) at a dilution of 1:2000.



Chromatin immunoprecipitation analysis of extracts of HeLa cells, using Phospho-POLR2A-S2/S5 Rabbit mAb (AP1354) and rabbit IgG. The amount of immunoprecipitated DNA was checked by quantitative PCR. Histogram was constructed by the ratios of the immunoprecipitated DNA to the input.



Validation Data

CUT&Tag Assay Kit (pAG-Tn5) for Illumina(RK20265) from 10⁵ K562 cells with 1 µg Phospho-Rpb1 CTD-S2/S5 Rabbit mAb (AP1354), along with a Goat Anti-Rabbit IgG(H+L). The CUT&Tag results indicate the enrichment pattern of Phospho-POLR2A-S2/S5 in representative gene loci (RPL30), as shown in figure.