

Phospho-POLR2A CTD-S2 Rabbit mAb

Catalog No.: AP0996 **Recombinant**

Basic Information

Observed MW

270kDa

Calculated MW

217kDa

Category

Primary antibody

Applications

WB, IHC-P, IF/ICC, ELISA, ChIP, ChIP-seq, CUT&Tag

Cross-Reactivity

Human, Mouse, Rat

CloneNo number

ARC1540

Recommended Dilutions

WB 1:500 - 1:2000

IHC-P 1:50 - 1:200

IF/ICC 1:50 - 1:200

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

ChIP-seq 1:50 - 1:100

CUT&Tag 10⁵ cells /1 µg

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.

Immunogen Information

Gene ID

5430

Swiss Prot

P24928

Immunogen

A phospho specific peptide corresponding to residues surrounding S2 of human POLR2A CTD repeat YSPTSPS.

Synonyms

RPB1; RPO2; POLR2; POLRA; RPBh1; RPOL2; NEDHIB; RpIILS; hsRPB1; hRPB220; Phospho-POLR2A CTD-S2

Product Information

Source

Rabbit

Isotype

IgG

Purification

Affinity purification

Storage

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

Buffer: PBS with 0.02% sodium azide, 0.05% BSA, 50% glycerol, pH7.3.

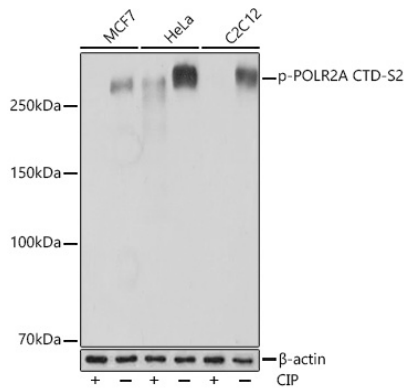
Contact

 | 400-999-6126

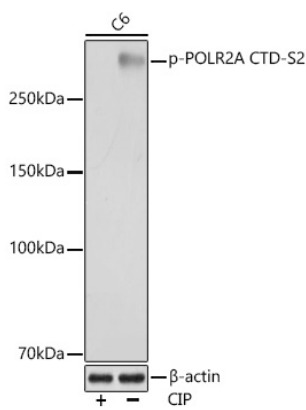
 | cn.market@abclonal.com.cn

 | www.abclonal.com.cn

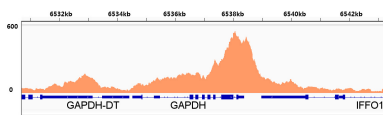
Validation Data



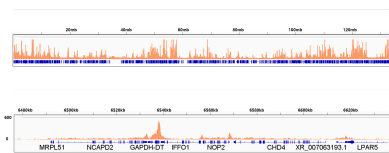
Western blot analysis of various lysates using Phospho-POLR2A CTD-S2 Rabbit mAb (AP0996) at 1:1000 dilution. MCF7 cells and HeLa cells and C2C12 cells were treated by CIP(20uL/400ul) at 37°C for 1 hour. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25µg per lane. Blocking buffer: 3% BSA. Detection: ECL Basic Kit (RM00020). Exposure time: 10s.



Western blot analysis of lysates from C6 cells, using Phospho-POLR2A CTD-S2 Rabbit mAb (AP0996) at 1:1000 dilution. C6 cells were treated by CIP(20uL/400ul) at 37°C for 1 hour. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution. Lysates/proteins: 25µg per lane. Blocking buffer: 3% BSA. Detection: ECL Basic Kit (RM00020). Exposure time: 1min.

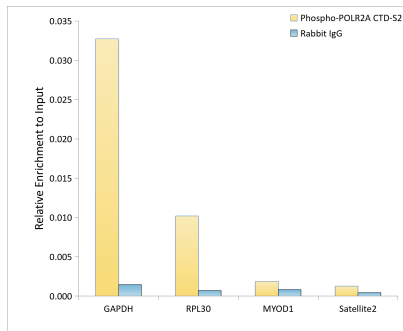


Chromatin immunoprecipitations were performed with cross-linked chromatin from 293F cells and Phospho-POLR2A-S2 (AP0996). The ChIP sequencing results indicate the enrichment pattern of Phospho-POLR2A-S2 in selected genomic region and representative gene loci (GAPDH), as shown in figure.

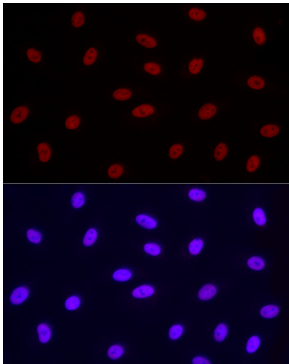


Chromatin immunoprecipitations were performed with cross-linked chromatin from 293F cells and Phospho-POLR2A-S2 (AP0996). The ChIP sequencing results indicate the enrichment pattern of Phospho-POLR2A-S2 in selected genomic region and representative gene loci (GAPDH), as shown in figure.

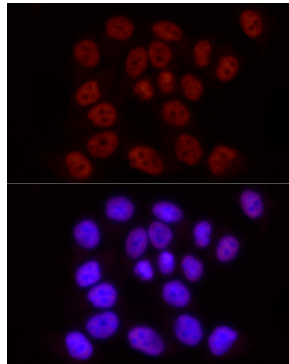
Validation Data



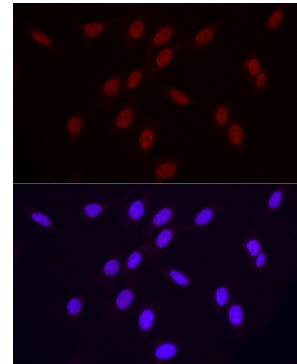
Chromatin immunoprecipitation analysis of extracts of 293F cells, using Phospho-POLR2A-S2 antibody (AP0996) and rabbit IgG. The amount of immunoprecipitated DNA was checked by quantitative PCR. Histogram was constructed by the ratios of the immunoprecipitated DNA to the input.



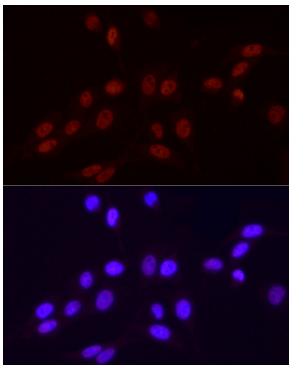
Immunofluorescence analysis of A-549 cells using Phospho-POLR2A CTD-S2 Rabbit mAb (AP0996) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



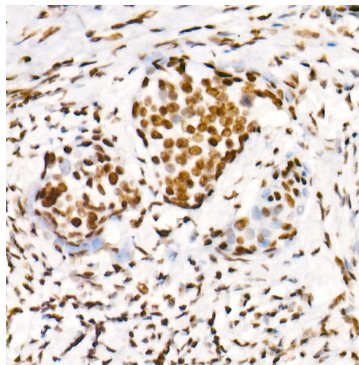
Immunofluorescence analysis of HeLa cells using Phospho-POLR2A CTD-S2 Rabbit mAb (AP0996) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



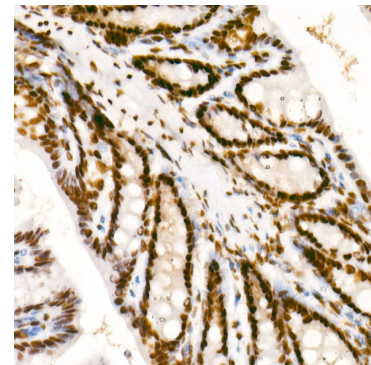
Immunofluorescence analysis of NIH/3T3 cells using Phospho-POLR2A CTD-S2 Rabbit mAb (AP0996) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of PC-12 cells using Phospho-POLR2A CTD-S2 Rabbit mAb (AP0996) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.

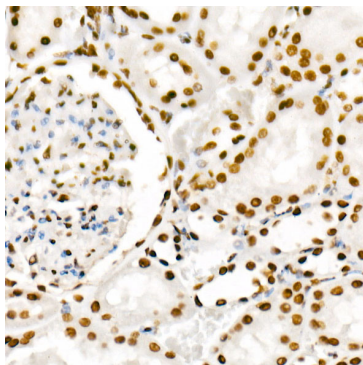


Immunohistochemistry analysis of paraffin-embedded Human cervix cancer using Phospho-POLR2A CTD-S2 Rabbit mAb (AP0996) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.

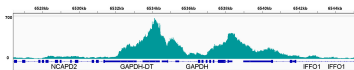


Immunohistochemistry analysis of paraffin-embedded Mouse colon using Phospho-POLR2A CTD-S2 Rabbit mAb (AP0996) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.

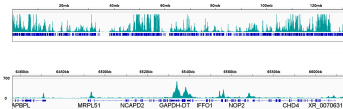
Validation Data



Immunohistochemistry analysis of paraffin-embedded Rat kidney using Phospho-POLR2A CTD-S2 Rabbit mAb (AP0996) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.



CUT&Tag was performed using the CUT&Tag Assay Kit(pAG-Tn5) forIllumina (RK20265) from 10⁵ Hela cells with 1μg Phospho-POLR2A CTD-S2 Rabbit mAb(AP0996), along with a Goat Anti-Rabbit IgG(H+L). The CUT&Tag results indicate the enrichment pattern of Phospho-POLR2A CTD-S2 in representative gene loci(GAPDH).



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