AP0996

Leader in Biomolecular Solutions for Life Science

www.abclonal.com

Phospho-POLR2A CTD-S2 Rabbit mAb

Catalog No.: AP0996 Recombinant 1 Publications

Basic Information

Observed MW
270kDa

Calculated MW
217kDa

Category
SMab Recombinant Monoclonal Antibody

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

Cross-Reactivity
Human,Mouse,Rat

CloneNo number
ARC1540

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	1:500 - 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	10^5 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; RpIILS; hsRPB1; hRPB220; Phospho-POLR2A CTD-S2

Product Information

Source
Rabbit

Isotype
IgG

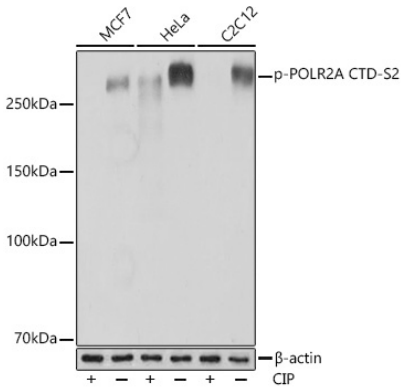
Purification
Affinity purification

Storage
Store at -20℃. Avoid freeze / thaw cycles.
Buffer: PBS with 0.02% sodium azide,0.05% BSA,50% glycerol,pH7.3.

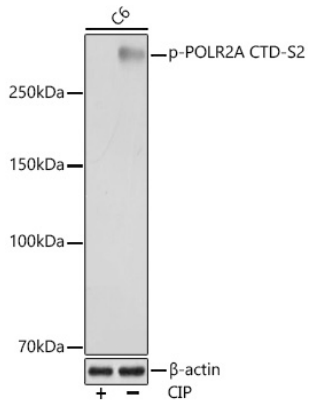
Contact

www.abclonal.com

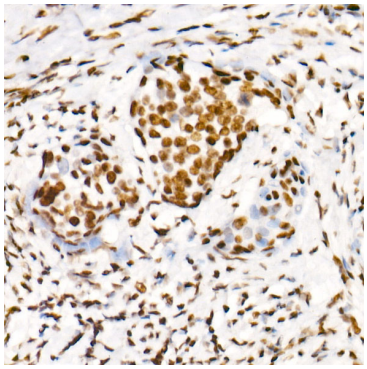
Validation Data



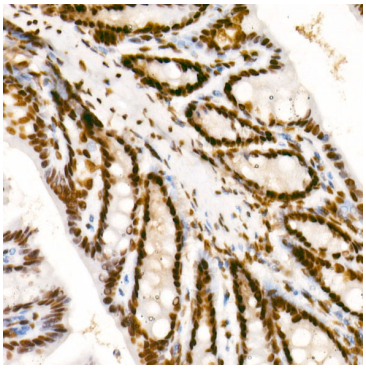
Western blot analysis of various lysates using Phospho-POLR2A CTD-S2 Rabbit mAb (AP0996) at 1:1000 dilution. MCF7 cells and HeLa cells and C2C12 cells were treated by CIP(20uL/400ul) at 37℃ for 1 hour.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: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



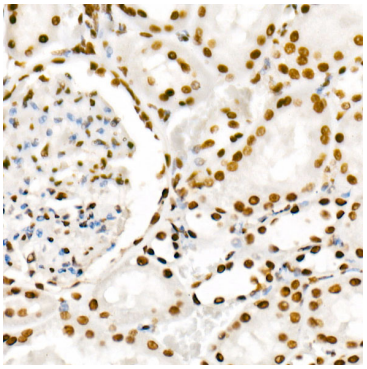
Western blot analysis of lysates from C6 cells, using Phospho-POLR2A CTD-S2 Rabbit mAb (AP0996) at 1:1000 dilution. C6 cells were treated by CIP(20uL/400ul) at 37℃ for 1 hour.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25µg per lane.
Blocking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



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 buffer (pH 6.0) prior to IHC staining.

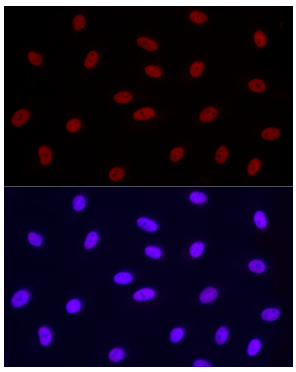


Immunohistochemistry analysis of paraffin-embedded Mouse colon using Phospho-POLR2A CTD-S2 Rabbit mAb (AP0996) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.

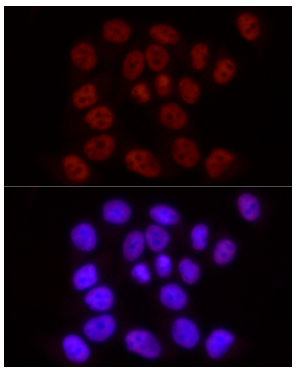


Immunohistochemistry analysis of paraffin-embedded Rat kidney using Phospho-POLR2A CTD-S2 Rabbit mAb (AP0996) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.

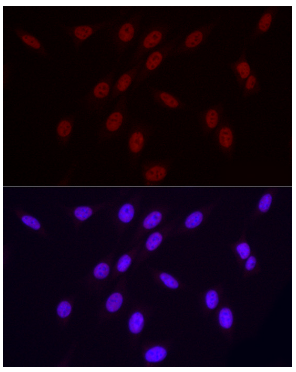
Validation Data



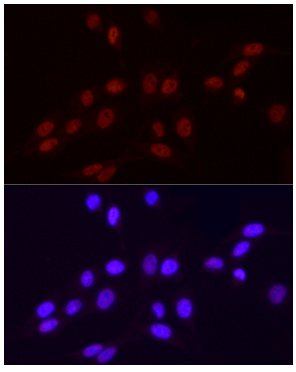
Immunofluorescence analysis of A-549 cells using Phospho-POLR2A CTD-S2 Rabbit mAb (AP0996) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



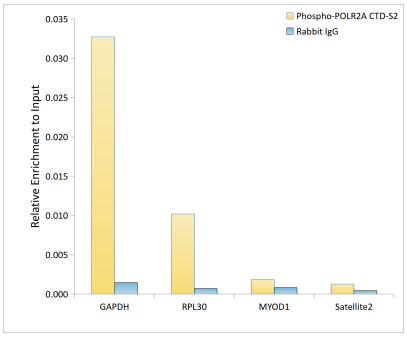
Immunofluorescence analysis of HeLa cells using Phospho-POLR2A CTD-S2 Rabbit mAb (AP0996) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



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.

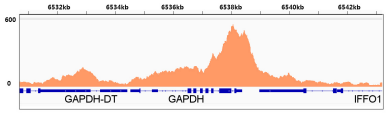


Immunofluorescence analysis of PC-12 cells using Phospho-POLR2A CTD-S2 Rabbit mAb (AP0996) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.

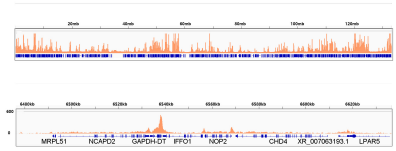


Chromatin immunoprecipitation analysis of extracts of 293F cells, using Phospho-POLR2A-S2 antibody (AP0996) and rabbit IgG.The amount of immunoprecipitated DNA was checked by quantitative PCR. Histogram was constructed by the ratios of the immunoprecipitated DNA to the input.

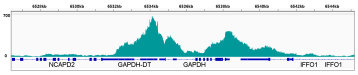
Validation Data

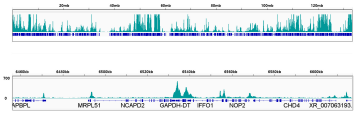


Chromatin immunoprecipitations were performed with cross-linked chromatin from 293F cells and Phospho-POLR2A-S2 (AP0996). The ChIP sequencing results indicate the enrichment pattern of Phospho-POLR2A-S2 in selected genomic region and representative gene loci (GAPDH), as shown in figure.



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.





CUT&Tag was performed using the CUT&Tag Assay Kit(pAG-Tn5) forIllumina (RK20265) from 10^5 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).

CUT&Tag was performed using the CUT&Tag Assay Kit(pAG-Tn5) forIllumina (RK20265) from 10^5 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).