

## Phospho-POLR2A-S2 Monoclonal Antibody

CABP0996

### Description

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This Phospho-POLR2A-S2 Monoclonal Antibody is supplied as a kit for advanced applications. The kit includes Bradford Reagent to quantify total protein concentration for accurate sample normalization (Optional).

### Product Information

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<b>SKU:</b>	CABP0996
<b>Contents:</b>	20 $\mu$ L, 100 $\mu$ L Bradford Reagent: 1 vial (2ml)
<b>Category:</b>	Monoclonal Antibody
<b>Synonyms:</b>	RPB1, RPO2, POLR2, POLRA, RPBh1, RPOL2, NEDHIB, RplILS, hsRPB1, hRPB220, Phospho-POLR2A CTD-S2
<b>Clone:</b>	ARC1540
<b>Applications:</b>	WB IHC-P IF/ICC ChIP ChIP-seq ELISA CUT&Tag
<b>Conjugation:</b>	Unconjugated
<b>Reactivity:</b>	Human, Mouse, Rat

### Antibody Data

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<b>Gene ID:</b>	5430
<b>Uniprot:</b>	AB_2863888
<b>Host Species:</b>	Rabbit
<b>Purification:</b>	Affinity purification
<b>Observed MW:</b>	270kDa
<b>Calculated MW:</b>	217kDa

## Preparation & Storage

**Storage:** Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS containing 50% glycerol and 0.05% BSA, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

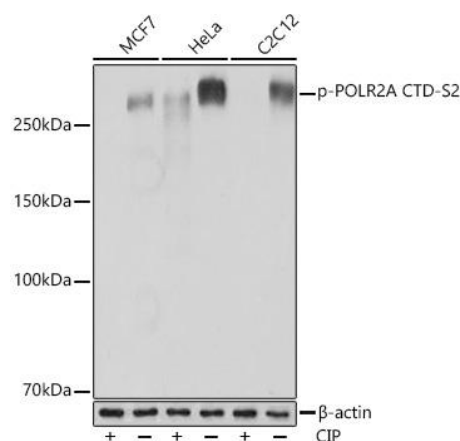
Store Bradford Reagent at Room Temperature for 1 Year.

**Positive Sample:** MCF7, HeLa, C2C12, C6

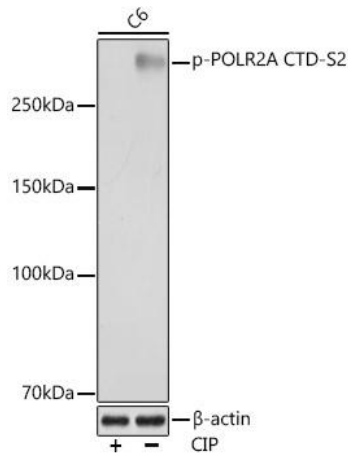
<b>Recommended Dilutions:</b>	<b>WB</b>	1:500 - 1:2000
	<b>IHC-P</b>	1:50 - 1:200
	<b>IF/ICC</b>	1:50 - 1:200
	<b>ELISA</b>	Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements. ChIP 5µg antibody for 10µg-15µg of Chromatin ChIP-seq 1:50 - 1:100 CUT&Tag 10 <sup>5</sup> cells /1 µg

**Protein Quantification (Optional):** To quantify total protein levels, use the Bradford Reagent included in this kit. Visit <https://www.assaygenie.com/bradford-protein-assay-protocol/> to view the full protocol

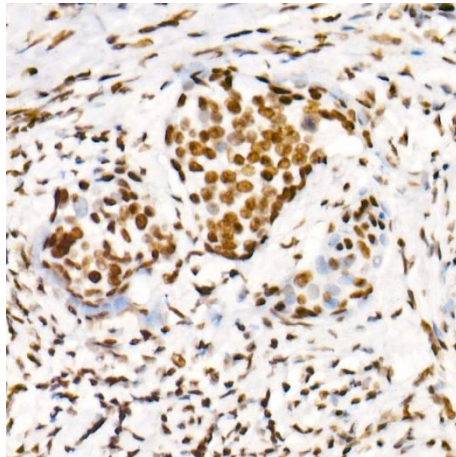
## Validation Data



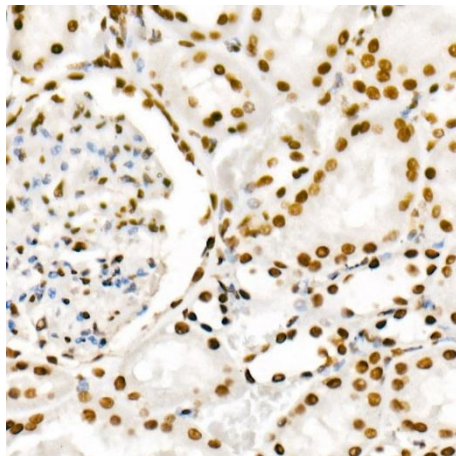
Western blot analysis of various lysates using Phospho-POLR2A CTD- Rabbit mAb (CABP0996) at 1:1000 dilution. cells and HeLa cells and C2C12 cells were treated by CIP(20uL/400ul) at 37°C for 1 hour. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (CABS014) at 1:10000 dilution. Lysates/proteins: 25µg per lane. Blocking buffer: 3% BSA. Detection: ECL Basic Kit (AbGn00020). Exposure time: 10s.



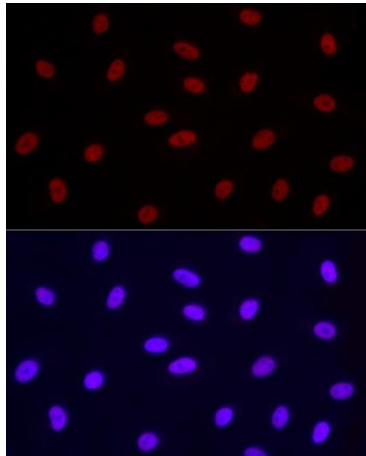
Western blot analysis of lysates from cells, using Phospho-POLR2A CTD- Rabbit mAb (CABP0996) at 1:1000 dilution. cells were treated by CIP(20uL/400ul) at 37°C for 1 hour. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (CABS014) at 1:10000 dilution. Lysates/proteins: 25µg per lane. Blocking buffer: 3% BSA. Detection: ECL Basic Kit (AbGn00020). Exposure time: 1min.



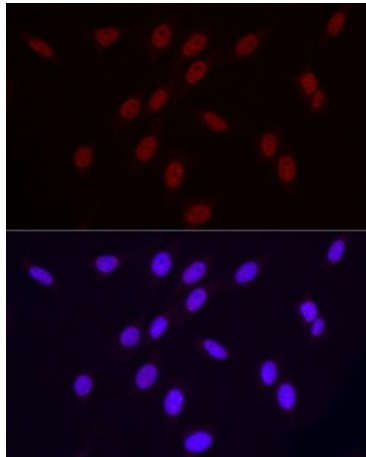
Immunohistochemistry analysis of paraffin-embedded Human cervix cancer using Phospho-POLR2A CTD- Rabbit mAb (CABP0996) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



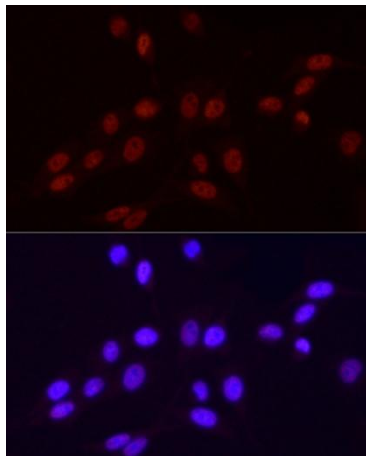
Immunohistochemistry analysis of paraffin-embedded Rat kidney using Phospho-POLR2A CTD- Rabbit mAb (CABP0996) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate buffer (pH 6.0) prior to IHC staining.



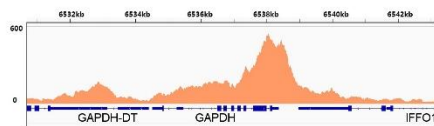
Immunofluorescence analysis of A-549 cells using Phospho-POLR2A CTD- Rabbit mAb (CABP0996) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (CABS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



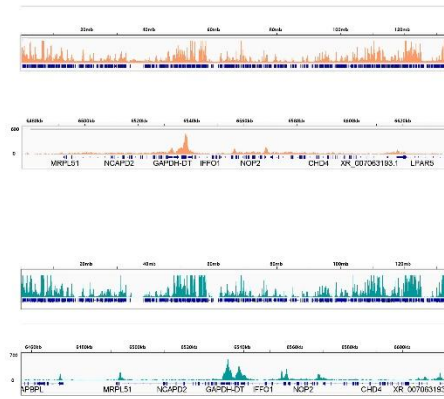
Immunofluorescence analysis of NIH/3T3 cells using Phospho-POLR2A CTD- Rabbit mAb (CABP0996) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (CABS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of PC-12 cells using Phospho-POLR2A CTD- Rabbit mAb (CABP0996) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (CABS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Chromatin immunoprecipitations were performed with cross-linked chromatin from 293F cells and Phospho-POLR2A- (CABP0996). The ChIP sequencing results indicate the enrichment pattern of Phospho-POLR2A- 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- (CABP0996). The ChIP sequencing results indicate the enrichment pattern of Phospho-POLR2A- 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 from  $10^5$  Hela cells with 1 $\mu$ g Phospho-POLR2A CTD- Rabbit mAb(CABP0996), along with a Goat Anti-Rabbit IgG(H+L). The CUT&Tag results indicate the enrichment pattern of Phospho-POLR2A CTD- in representative gene loci(GAPDH).