

## RNA pol II CTD phospho Thr4 antibody (mAb)

**Catalog Nos:** 61361, 61961, 61362

**RRID:** AB\_2750848

**Clone:** 6D7

**Isotype:** IgG2b

**Application(s):** ChIP, DB, ELISA, ICC, IF, IP, WB

**Reactivity:** Human, Wide Range Predicted

**Quantities:** 100 µg, 50 µg, 10 µg

**Purification:** Protein G Chromatography

**Host:** Rat

**Concentration:** 1 µg/µl

**Molecular Weight:** 240 kDa

**Background:** RNA pol II (RNA polymerase II) is a complex of 12 proteins that participates in transcription, mRNA processing, and transcription-coupled DNA repair. RNA polymerase II is distinguished by its large carboxyl-terminal repeat domain (CTD), composed of repeats of the consensus heptapeptide Tyr1-Ser2-Pro3-Thr4-Ser5-Pro6-Ser7. Polo-like kinase 3 (plk3) has been reported to phosphorylate Thr4 which may be required for transcriptional elongation.

**Immunogen:** This antibody was raised against a synthetic peptide corresponding to RNA Pol II CTD phosphorylated at threonine 4.

**Buffer:** Purified IgG in PBS with 30% glycerol and 0.035% sodium azide.

### Application Notes:

Validated Applications:

WB: 0.5 - 2 µg/ml

DB: 1 µg/ml

Published Applications:

ChIP

IP

ICC/IF

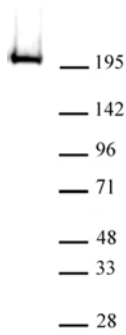
WB

ELISA

See references for more information. Individual optimization may be required.

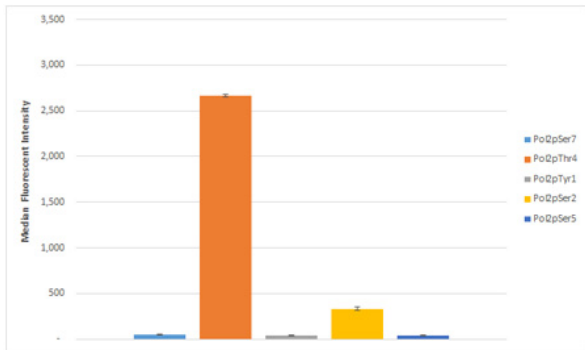
**Storage and Guarantee:** Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.



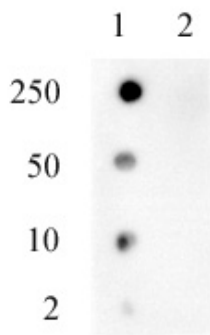
**Western blot of RNA pol II CTD phospho Thr4 mAb.**

30 µg of HeLa cell nuclear extract was probed with RNA pol II CTD phospho Thr4 antibody at 2 µg/ml in buffer containing 0.05% Tween.



**RNA pol II CTD phospho Thr4 antibody tested by bead-based assay**

Luminex bead-based specificity analysis was used to confirm the specificity of RNA pol II CTD phospho Thr4 antibody for RNA pol II CTD peptides conjugated to MagPlex Luminex beads and incubated with 50ng of RNA pol II CTD phospho Thr4 antibody. Peptide-bound antibody was detected with anti-mouse IgG-Phycoerythrin and read in a Luminex instrument. (Luminex® is a registered trademark of Luminex Corporation.)



**Dot blot analysis was used to confirm the specificity of RNA Pol II phospho Thr4 antibody**

2, 10, 50, and 250 pmoles of RNA Pol II CTD were spotted onto nitrocellulose and probed with the antibody at 1 µg/ml. Lane 1: RNA Pol II CTD phospho-Thr4. Lane 2: RNA Pol II CTD Thr4 (unmodified)