

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

**Catalog Nos:** 61307, 61308

**RRID:** AB\_2793588

**Isotype:** IgG

**Application(s):** WB

**Reactivity:** Human

**Quantities:** 100 µg, 10 µg

**Purification:** Protein A Chromatography

**Host:** Rabbit

**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 RNA Pol II CTD phospho Thr4 antibody was raised against a peptide containing the RNA Pol II CTD sequence phosphorylated at threonine 4.

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

### Application Notes:

Applications Validated by Active Motif:

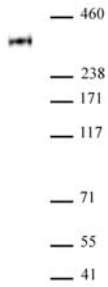
WB\*: 1 - 2 µg/ml dilution

The addition of 0.05% Tween 20 in the blocking buffer and primary antibody incubation buffer is recommended to aid in detection by Western blot.

\*Note: many chromatin-bound proteins are not soluble in a low salt nuclear extract and fractionate to the pellet. Therefore, we recommend a High Salt / Sonication Protocol when preparing nuclear extracts for Western Blot.

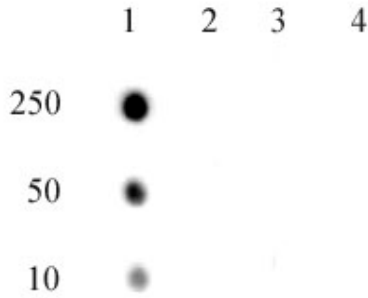
**Storage and Guarantee:** Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This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



**RNA pol II CTD phospho Thr4 antibody pAb tested by Western blot.**

Nuclear extract of HeLa cells (40 µg) probed with RNA pol II CTD phospho Thr4 antibody at a dilution of 2 µg/ml.



**RNA Pol II CTD phospho Thr4 pAb tested by dot blot analysis.**

Dot blot analysis was used to confirm the specificity of RNA Pol II CTD phospho Thr4 pAb. Peptides corresponding to the immunogen and related peptides were spotted onto PVDF and probed with the antibody at a dilution of 1 µg/ml. The amount of peptide (picomoles) spotted is indicated next to each row.

- Lane 1: Phospho Thr4 of RNA Pol II CTD peptide.
- Lane 2: Unmodified Thr4 of RNA Pol II CTD peptide.
- Lane 3: Phospho Ser2 of RNA Pol II CTD peptide.
- Lane 4: Phospho Ser5 of RNA Pol II CTD peptide.