

## RNA pol II antibody (mAb)

**Catalog Nos:** 61667, 61668

**RRID:** AB\_2687513

**Clone:** 1F4B6

**Isotype:** IgG2a

**Application(s):** ChIP, ChIP-Seq, ICC, IF, WB

**Reactivity:** Human

**Quantities:** 100 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 responsible for synthesizing messenger RNA in eukaryotes. RNA pol II 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, RNA pol II, in combination with several other polymerase subunits, form the DNA binding domain of the polymerase, a groove in which the DNA template is transcribed into RNA.

**Immunogen:** This antibody was raised against a synthetic peptide containing the CTD of human RNA Polymerase II.

**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:

ChIP: 5 - 10 µg per ChIP

ChIP-Seq: 5 - 10 µg each

ICC/IF: 5 µg/ml dilution

WB\*: 0.5 - 2 µg/ml dilution

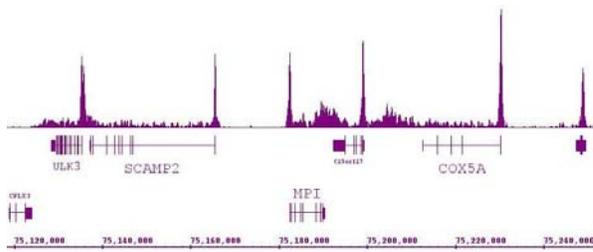
ChIP-Seq validation was performed by Active Motif's Epigenetics Services; the complete data set is available in the UCSC Genome Browser by clicking [here](#).

\*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. The addition of 0.1% Tween 20 in the blocking buffer and primary antibody incubation buffer is also recommended to aid in detection by Western blot.

For RNA Pol II, we also offer AbFlex® RNA Pol II Recombinant Antibody (rAb). For details, see Catalog No. 91151.

**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.

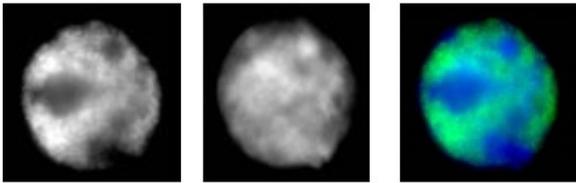


**RNA pol II antibody (mAb) (Clone 1F4B6) tested by ChIP-Seq.**

ChIP was performed using the ChIP-IT<sup>®</sup> High Sensitivity Kit (Cat. No. 53040) with 30 µg of chromatin from HL-60 cells and 4 µg of antibody. ChIP DNA was sequenced on the Illumina HiSeq and 14 million sequence tags were mapped to identify RNA pol II binding sites. The image shows binding across a region of chromosome 15. You can view the complete data set in the UCSC Genome Browser, starting at this specific location, here.

**RNA pol II antibody (mAb) (Clone 1F4B6) tested by immunofluorescence.**

Left: HeLa cell stained with RNA pol II antibody (mAb). Middle: Hoechst. Right: Merge.



**RNA pol II antibody (mAb) (Clone 1F4B6) tested by Western blot.**

HeLa nuclear extract (30 µg per lane) probed with RNA pol II antibody (mAb) at a 1 µg/ml dilution.

