

## CDK9 antibody (pAb)

**Catalog Nos:** 61559, 61560**RRID:** AB\_2793678**Isotype:** IgG**Application(s):** WB**Reactivity:** Human**Volumes:** 100 µl, 10 µl**Purification:** Affinity Purified**Host:** Rabbit**Molecular Weight:** 44 kDa

**Background:** CDK9 (cyclin-dependent kinase 9) is a protein kinase involved in the regulation of transcription. Member of the cyclin-dependent kinase pair (CDK9/cyclin-T) complex, also called positive transcription elongation factor b (P-TEFb), which facilitates the transition from abortive to productive elongation by phosphorylating the CTD (C-terminal domain) of the large subunit of RNA polymerase II (RNAP II) POLR2A, SUPT5H and RDBP. This complex is inactive when in the 7SK snRNP complex form. Phosphorylates EP300, MYOD1, RPB1/POLR2A and AR, and the negative elongation factors DSIF and NELF. Regulates cytokine inducible transcription networks by facilitating promoter recognition of target transcription factors (e.g. TNF-inducible RELA/p65 activation and IL-6-inducible STAT3 signaling). Promotes RNA synthesis in genetic programs for cell growth, differentiation and viral pathogenesis. P-TEFb is also involved in cotranscriptional histone modification, mRNA processing and mRNA export. Modulates a complex network of chromatin modifications including histone H2B monoubiquitination (H2Bub1), H3 lysine 4 trimethylation (H3K4me3) and H3K36me3; integrates phosphorylation during transcription with chromatin modifications to control co-transcriptional histone mRNA processing.

**Immunogen:** This antibody was raised against a peptide within the N-terminal region of human CDK9.

**Buffer:** Purified IgG in 70 mM Tris (pH 8), 105 mM NaCl, 31 mM glycine, 0.07 mM EDTA, 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

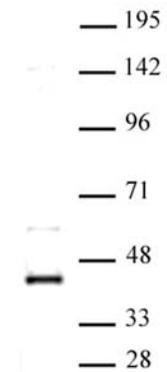
**Application Notes:**

Applications Validated by Active Motif:

WB: 1:250 - 1:500 dilution

**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.



**CDK9 antibody (pAb) tested by Western blot.** Nuclear extract of HL60 cells (20 µg) probed with CDK9 antibody (pAb) at a dilution of 1:500.