CDK8 antibody (pAb)

Catalog Nos: 61481, 61482
RRID: AB_2793654
Isotype: IgG
Application(s): ChIP, ChIP-Seq, WB
Reactivity: Human, Mouse

Volumes: 100 µl, 10 µl
Purification: Affinity Purified
Host: Rabbit
Concentration: 0.566 µg/µl
Molecular Weight: 60 kDa

Background: CDK8 (Cyclin-Dependent Kinase 8) is a component of the Mediator complex, a coactivator involved in regulated gene transcription of nearly all RNA polymerase II-dependent genes. Mediator functions as a bridge to convey information from gene-specific regulatory proteins to the basal RNA polymerase II transcription machinery. Mediator is recruited to promoters by direct interactions with regulatory proteins and serves as a scaffold for the assembly of a functional preinitiation complex with RNA polymerase II and the general transcription factors. CDK8 phosphorylates the CTD (C-terminal domain) of the large subunit of RNA polymerase II (RNAp II), which may inhibit the formation of a transcription initiation complex. Other studies have indicated a role in transcriptional activation in response to hypoxia.

Immunogen: This antibody was raised against a peptide within the C-terminal region of human CDK8.

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

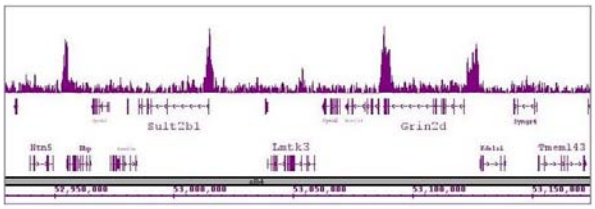
Application Notes:
Applications Validated by Active Motif:
ChIP: 10 µl per ChIP
ChIP-Seq: 10 µl each
WB: 1:500 - 1:1,500 dilution

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.

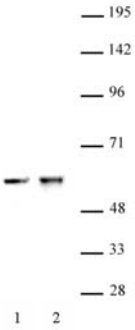
The addition of 0.05% Tween 20 in the blocking buffer and primary antibody incubation buffer is recommended to aid in detection by Western blot. Individual optimization may be required.

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.



CDK8 antibody (pAb) tested by ChIP-Seq.
ChIP was performed using the ChIP-IT® High Sensitivity Kit (Cat. No. 53040) with 30 ug of chromatin from Mouse embryonic fibroblasts and 7 µl of antibody. ChIP DNA was sequenced on the Illumina HiSeq and 20 million sequence tags were mapped to identify CDK8 binding sites. The image shows binding across a region of chromosome 7. You can view the complete data set in the UCSC Genome Browser, starting at this specific location, here.



CDK8 antibody (pAb) tested by Western blot.
Detection of CDK8 by Western blot analysis. Lane 1: Nuclear extract of Caco-2 cells (20 µg). Lane 2: Nuclear extract of SW-48 cells (20 µg).
Both were probed with CDK8 antibody (pAb) at a 1:1,000 dilution.