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CDK8 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP7524a

Specification

CDK8 Antibody (N-term) - Product Information

Application	**WB,E**
Primary Accession	P49336
Other Accession	Q8R3L8
Reactivity	**Human**
Predicted	**Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**53284**
Antigen Region	**1-30**

CDK8 Antibody (N-term) - Additional Information

Gene ID 1024

Other Names
Cyclin-dependent kinase 8, Cell division protein kinase 8, Mediator complex subunit CDK8, Mediator of RNA polymerase II transcription subunit CDK8, Protein kinase K35, CDK8

Target/Specificity
This CDK8 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human CDK8.

Dilution
WB~~1:1000

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
CDK8 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CDK8 Antibody (N-term) - Protein Information

Name CDK8

Function 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 pre-initiation complex with RNA polymerase II and the general transcription factors. 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. Phosphorylates CCNH leading to down-regulation of the TFIIH complex and transcriptional repression. Recruited through interaction with MAML1 to hyperphosphorylate the intracellular domain of NOTCH, leading to its degradation.

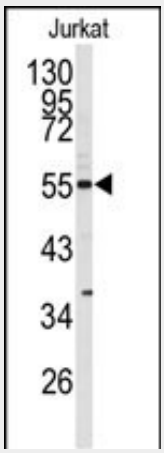
Cellular Location
Nucleus.

CDK8 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CDK8 Antibody (N-term) - Images



Western blot analysis of CDK8 antibody (N-term) (Cat.# AP7524a) in Jurkat cell line lysates (35ug/lane). CDK8 (arrow) was detected using the purified Pab.

CDK8 Antibody (N-term) - Background

CDK8 is a member of the cyclin-dependent protein kinase (CDK) family. CDK family members are highly similar to the gene products of Saccharomyces cerevisiae cdc28, and Schizosaccharomyces pombe cdc2, and are known to be important regulators of cell cycle progression. This kinase and its regulatory subunit cyclin C are components of the RNA polymerase II holoenzyme complex, which phosphorylates the carboxy-terminal domain (CTD) of the largest subunit of RNA polymerase II. This kinase has also been shown to regulate transcription by targeting the CDK7/cyclin H subunits of the

general transcription initiation factor IIH (TFIIH), thus providing a link between the 'Mediator-like' protein complexes and the basal transcription machinery.

CDK8 Antibody (N-term) - References

Akoulitchev, S., et al., Nature 407(6800):102-106 (2000).
Di Pietro, C., et al., Somat. Cell Mol. Genet. 25(3):185-189 (1999).
Rickert, P., et al., Oncogene 18(4):1093-1102 (1999).
Tassan, J.P., et al., Proc. Natl. Acad. Sci. U.S.A. 92(19):8871-8875 (1995).
Schultz, S.J., et al., Cell Growth Differ. 4(10):821-830 (1993).

CDK8 Antibody (N-term) - Citations

- Downregulation of cyclin-dependent kinase 8 by microRNA-148a suppresses proliferation and invasiveness of papillary thyroid carcinomas.