

**CDK8 Antibody (Center)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP11972c****Specification**

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**CDK8 Antibody (Center) - Product Information**

Application	WB, FC,E
Primary Accession	<a href="#">P49336</a>
Other Accession	<a href="#">Q66KH9</a> , <a href="#">Q8R3L8</a> , <a href="#">Q8JH47</a> , <a href="#">NP_001251</a>
Reactivity	Human
Predicted	Zebrafish, Mouse, Xenopus
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	249-277

**CDK8 Antibody (Center) - 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 249-277 amino acids from the Central region of human CDK8.

**Dilution**

WB~~1:1000  
FC~~1:10~50

**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 (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**CDK8 Antibody (Center) - 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 TFIID complex and transcriptional repression. Recruited through interaction with MAML1 to hyperphosphorylate the intracellular domain of NOTCH, leading to its degradation.

**Cellular Location**

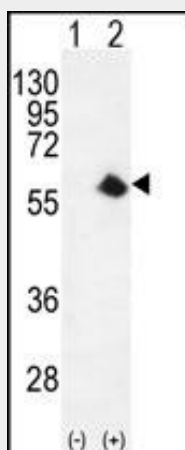
Nucleus.

**CDK8 Antibody (Center) - Protocols**

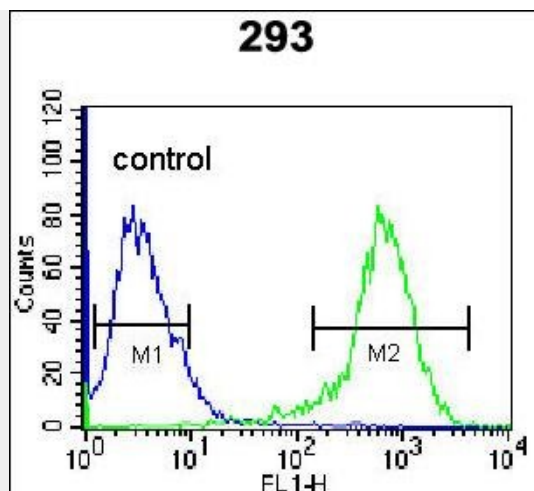
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**CDK8 Antibody (Center) - Images**



Western blot analysis of CDK8 (arrow) using rabbit polyclonal CDK8 Antibody (Center) (Cat. #AP11972c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the CDK8 gene.



CDK8 Antibody (Center) (Cat. #AP11972c) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

### CDK8 Antibody (Center) - Background

The protein encoded by this gene 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 (Center) - References

- Seo, J.O., et al. *Oncol. Rep.* 24(1):285-291(2010)
- Tsutsui, T., et al. *Seikagaku* 82(3):191-199(2010)
- Chattopadhyay, I., et al. *Mutat. Res.* 696(2):130-138(2010)
- Donner, A.J., et al. *Nat. Struct. Mol. Biol.* 17(2):194-201(2010)
- Alarcon, C., et al. *Cell* 139(4):757-769(2009)