

CDK8 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP7524a**Specification**

CDK8 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [P49336](#)**CDK8 Antibody (N-term) Blocking Peptide - 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

The synthetic peptide sequence used to generate the antibody [AP7524a](/product/products/AP7524a) was selected from the N-term region of human CDK8 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CDK8 Antibody (N-term) Blocking Peptide - 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 (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

CDK8 Antibody (N-term) Blocking Peptide - Images**CDK8 Antibody (N-term) Blocking Peptide - 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) Blocking Peptide - 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).