

CDK9 (phospho T29) polyclonal antibody

Catalog # PAB10000 Size 100 ug

Applications

Western Blot (Recombinant protein)



Western blot using CDK9 (phospho T29) polyclonal antibody (Cat # PAB10000) shows detection of phospho-CDK9.

100 ng of purified P-TEFb, which contains CDK9 and its regulatory cyclin T1 subunit, was incubated with ATP in the presence or absence of Brd4, a protein known to induce CDK9 phosphorylation at T29.

The primary antibody was used at a 1:1000 dilution.

Personal Communication, J. Brady, NCI, Bethesda, MD.

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic phosphopeptide of CDK9.
Immunogen	Synthetic phosphopeptide corresponding to residues surrounding T29 of human CDK9.
Host	Rabbit
Reactivity	Human, Mouse, Rat
Specificity	This antibody is specific to human CDK9 protein phosphorylated at T29.
Form	Liquid
Quality Control Testing	Antibody Reactive Against Synthetic Peptide.
Recommend Usage	ELISA (1:5000-1:24000) Western Blot (1:200-1:2000) The optimal working dilution should be determined by the end user.
Storage Buffer	In 20 mM KH ₂ PO ₄ , 150 mM NaCl, pH 7.2 (0.01% sodium azide)

Storage Instruction

Store at 4°C. For long term storage store at -20°C.
Aliquot to avoid repeated freezing and thawing.

Note

This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

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- Immunoprecipitation

- Enzyme-linked Immunoabsorbent Assay

Gene Info — CDK9

Entrez GeneID[1025](#)**Protein Accession#**[NP_001252;P50750](#)**Gene Name**

CDK9

Gene Alias

C-2k, CDC2L4, CTK1, PITALRE, TAK

Gene Description

cyclin-dependent kinase 9

Omim ID[603251](#)**Gene Ontology**[Hyperlink](#)**Gene Summary**

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 *S. cerevisiae* cdc28, and *S. pombe* cdc2, and known as important cell cycle regulators. This kinase was found to be a component of the multiprotein complex TAK/P-TEFb, which is an elongation factor for RNA polymerase II-directed transcription and functions by phosphorylating the C-terminal domain of the largest subunit of RNA polymerase II. This protein forms a complex with and is regulated by its regulatory subunit cyclin T or cyclin K. HIV-1 Tat protein was found to interact with this protein and cyclin T, which suggested a possible involvement of this protein in AIDS. [provided by RefSeq]

Other Designations

CDC2-related kinase|OTTHUMP00000022198|cell division protein kinase 9|serine/threonine protein kinase PITALRE

Publication Reference

- [Tax interacts with P-TEFb in a novel manner to stimulate human T-lymphotropic virus type 1 transcription.](#)
Zhou M, Lu H, Park H, Wilson-Chiru J, Linton R, Brady JN.
Journal of Virology 2006 May; 80(10):4781.
- [The bromodomain protein Brd4 is a positive regulatory component of P-TEFb and stimulates RNA polymerase II-dependent transcription.](#)
Jang MK, Mochizuki K, Zhou M, Jeong HS, Brady JN, Ozato K.
Molecular Cell 2005 Aug; 19(4):523.
- [Differential localization and expression of the Cdk9 42k and 55k isoforms.](#)
Liu H, Herrmann CH.
Journal of Cellular Physiology 2005 Apr; 203(1):251.