



Cdk9 Rabbit mAb

Catalog No	YP-rAb-17282
Isotype	IgG
Reactivity	Human,Mouse,Rat
Applications	WB,IHC,IF,IP,ELISA
Gene Name	CDK9 CDC2L4 TAK
Protein Name	Cdk9
Purification Process	Protein A
Specificity	Endogenous
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA
Source	Monoclonal, Rabbit,IgG
Dilution	IHC 1:200-1:1000; WB 1:2000-1:10000; IF 1:200-1:1000; ELISA 1:5000-1:20000; IP 1:50-1:200; Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	-15 ° C to -25 ° C/1 year(Do not lower than -25 ° C)
Synonyms	Cyclin-dependent kinase 9 ; EC 2.7.11.23 ; C-2K ; Cell division cycle 2-like protein kinase 4 ; Cell division protein kinase 9 ; Serine/threonine-protein kinase PITALRE ; Tat-associated kinase complex catalytic subunit ;
Observed Band	43kD
Calculated Molecular Weight	43kD
Cell Pathway	Nucleus. Cytoplasm. Nucleus, PML body. Accumulates on chromatin in response to replication stress. Complexed with CCNT1 in nuclear speckles, but uncomplexed form in the cytoplasm. The translocation from nucleus to cytoplasm is XPO1/CRM1-dependent. Associates with PML body when acetylated.
Tissue Specificity	Ubiquitous.
Function	Catalytic activity:ATP + [DNA-directed RNA polymerase] = ADP + [DNA-directed RNA polymerase] phosphate.,Catalytic activity:ATP + a protein = ADP + a phosphoprotein.,Function:Member of the cyclin-dependent kinase pair (CDK9/cyclin-T) complex, also called positive transcription elongation factor b (P-TEFb), which facilitates the transition from abortive to production elongation by phosphorylating the CTD (C-terminal domain) of the large subunit of RNA polymerase II (RNAP II), SUPT5H and RDBP. The CDK9/cyclin-K complex has also a kinase activity toward CTD of RNAP II and can substitute for P-TEFb in vitro.,similarity:Belongs to the protein kinase superfamily. CMGC Ser/Thr protein





kinase family. CDC2/CDKX subfamily. similarity: Contains 1 protein kinase domain. subunit: Associates with CCNT1/cyclin-T1 to form P-TEFb. P-TEFb forms a complex with AFF4/AF5Q31. Also associates with CCNK/cyclin-K. Component of a complex which is at least composed of HTATSF1/Tat-SF1, P-TEFb complex, RNA pol II, SUPT5H, and NCL/nucleolin. Component of the 7SK snRNP complex at least composed of P-TEFb (composed of CDK9 and CCNT1/cyclin-T1), HEXIM1, HEXIM2, BCDIN3, SART3 proteins and 7SK and U6 snRNAs. tissue specificity: Ubiquitous.

Background

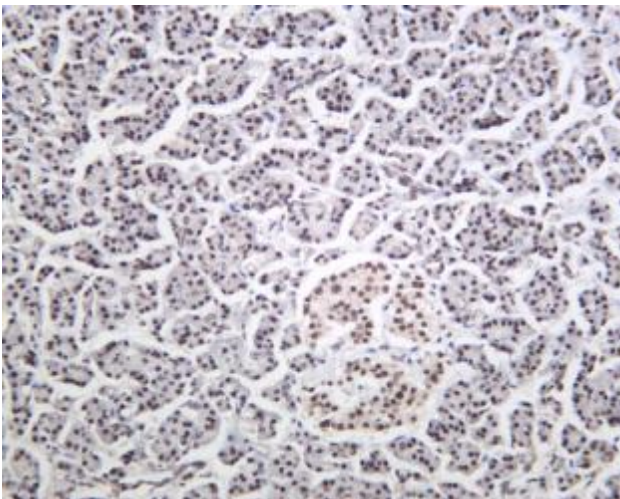
cyclin dependent kinase 9(CDK9) Homo sapiens The protein encoded by this gene is a member of the cyclin-dependent protein kinase (CDK) family. CDK family members are highly similar to the gene products of *S. cerevisiae* cdc28, and *S. pombe* cdc2, and known as important cell cycle regulators. This kinase 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, Jul 2008],

matters needing attention

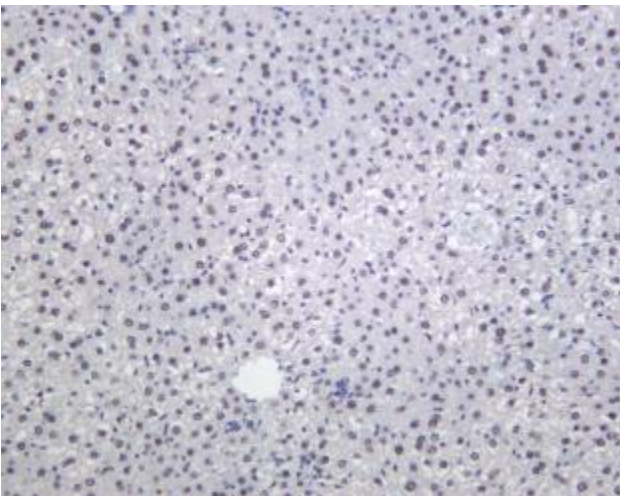
Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

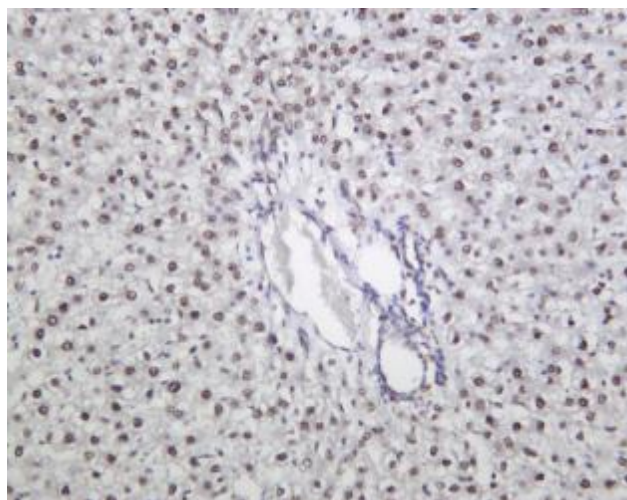


Human pancreas was stained with anti-Cdk9 Rabbit antibody

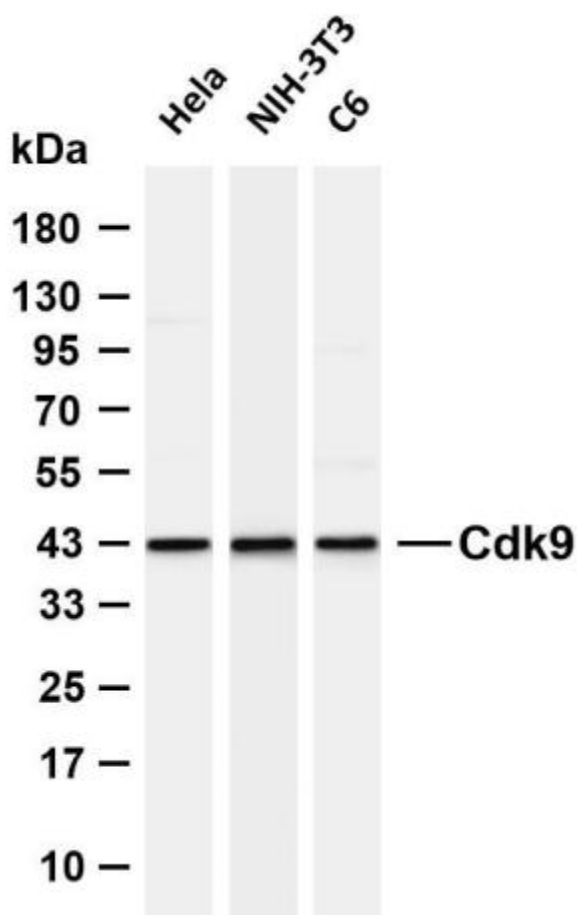


Mouse liver was stained with anti-Cdk9 Rabbit antibody





Rat liver was stained with anti-Cdk9 Rabbit antibody



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Cdk9 antibody. The HRP-conjugated Goat anti-Rabbit IgG (H + L) antibody was used to detect the antibody. Lane 1: HeLa Lane 2: NIH-3T3 Lane 3: C6
Predicted band size: 43kDa Observed band size: 43kDa

