Product Name: **Cdk9 (phospho Thr186) Rabbit Polyclonal Antibody**
Catalog #: **APRab04437**
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Phosphorylated
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,ELISA 1:5000-1:10000
Molecular Weight	42kDa

Antigen Information

Gene Name	CDK9
Alternative Names	CDK9; CDC2L4; TAK; Cyclin-dependent kinase 9; 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
Gene ID	1025.0
SwissProt ID	P50750
Immunogen	The antiserum was produced against synthesized peptide derived from human CDK9 around the phosphorylation site of Thr186. AA range:152-201

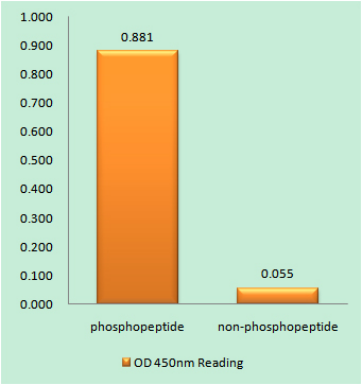
Background

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],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.,

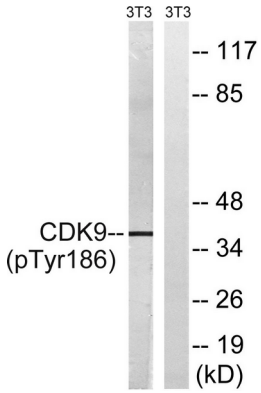
Research Area

Cell Growth

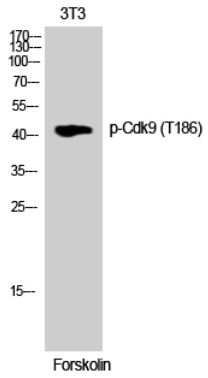
Image Data



Enzyme-Linked Immunosorbent Assay （Phospho-ELISA） for Immunogen Phosphopeptide （Phospho-left） and Non-Phosphopeptide （Phospho-right）, using CDK9 （Phospho-Thr186） Antibody



Western blot analysis of lysates from NIH/3T3 cells treated with Forskolin 40nM 30 ', using CDK9 (Phospho-Thr186) Antibody. The lane on the right is blocked with the phospho peptide.



Western Blot analysis of 3T3 cells using Phospho-Cdk9 (T186) Polyclonal Antibody cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003,Inventbiotech,MN,USA).