

For Research Use Only

# CDK9 Recombinant antibody

Catalog Number: 83662-2-RR



## Basic Information

<b>Catalog Number:</b> 83662-2-RR	<b>GenBank Accession Number:</b> BC001968	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 1025	<b>CloneNo.:</b> 240600E3
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P50750	<b>Recommended Dilutions:</b> WB 1:5000-1:50000 IHC 1:50-1:500 IF/ICC 1:500-1:2000
<b>Isotype:</b> IgG	<b>Full Name:</b> cyclin-dependent kinase 9	
<b>Immunogen Catalog Number:</b> AG2318	<b>Calculated MW:</b> 372 aa, 43 kDa	
	<b>Observed MW:</b> 38-42 kDa, 55 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, FC (Intra), ELISA	<b>Positive Controls:</b> WB : HepG2 cells, HeLa cells, Jurkat cells, HT-29 cells, HEK-293 cells IHC : human lung cancer tissue, IF/ICC : HeLa cells,
<b>Species Specificity:</b> human	
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## Background Information

CDK9(Cyclin-dependent kinase 9) is a member of the Cdc2-like family of kinases. Its cyclin partners are members of the family of cyclin T (T1, T2a and T2b) and cyclin K. The CDK9/cyclin T complexes appear to be involved in regulating several physiological processes. CDK9 has also been described as the kinase of the TAK complex, which is homologous to the P-TEFb complex and involved in HIV replication. In addition, CDK9 seems to have an anti-apoptotic function in monocytes, that may be related to its control over differentiation of monocytes (PMID: 12432243). CDK9 has two isoforms with the molecular mass of 42 kDa and 55 kDa, and the relative abundance of Cdk9(42kDa) and Cdk9(55kDa) changes in different cell types (PMID: 12706900, 15780980).

## Storage

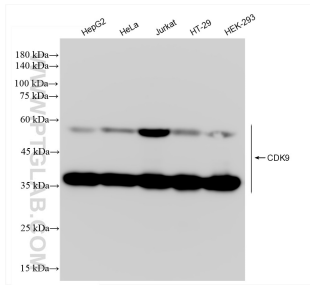
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

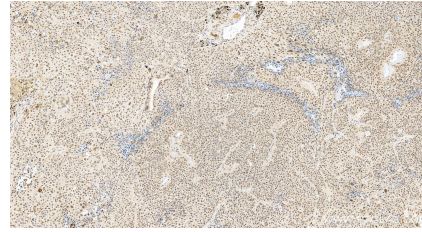
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

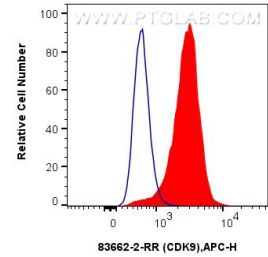
## Selected Validation Data



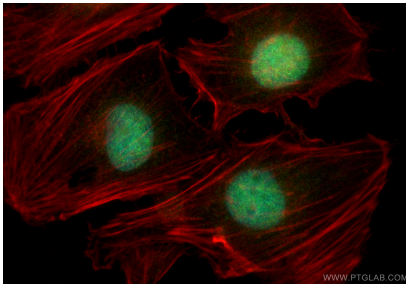
Various lysates were subjected to SDS PAGE followed by western blot with 83662-2-RR (CDK9 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



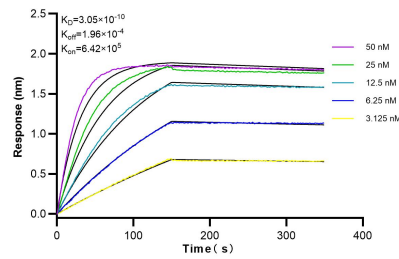
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 83662-2-RR (CDK9 antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1x10<sup>6</sup> HeLa cells were intracellularly stained with 0.25 ug CDK9 Recombinant antibody (83662-2-RR, Clone:240600E3) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using CDK9 antibody (83662-2-RR, Clone: 240600E3 ) at dilution of 1:1000 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-phalloidin (red).



Biolayer interferometry (BLI) kinetic assays of 83662-2-RR against Human CDK9 were performed. The affinity constant is 0.305 nM.