For Research Use Only

CDK9 Recombinant antibody

Catalog Number:83662-2-RR



Basic Information

Catalog Number: GenBank Accession Number: 83662-2-RR BC001968

Concentration: GeneID (NCBI):
1000 ug/ml 1025
Source: UNIPROT ID:
Rabbit P50750

IgG cyclin-dependent kinase 9

Immunogen Catalog Number:Calculated MW:AG2318372 aa, 43 kDaObserved MW:

38-42 kDa, 55 kDa

Full Name:

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), ELISA

Species Specificity:

human

Isotype:

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

Purification Method: Protein A purification

CloneNo.: 240600E3

Recommended Dilutions: WB 1:5000-1:50000 IHC 1:50-1:500 IF/ICC 1:500-1:2000

Positive Controls:

WB: HepG2 cells, HeLa cells, Jurkat cells, HT-29 cells,

HEK-293 cells

IHC: human lung cancer tissue,

IF/ICC: HeLa cells,

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 antiapoptotic 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

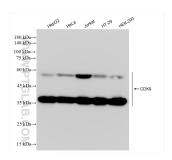
Storage:

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

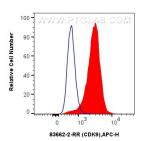
Selected Validation Data



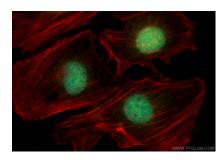
Various lysates were subjected to SDS PAGE followed by western blot with 83662-2-RR (CDK9 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



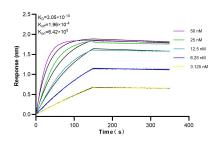
Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 83662-2-RR (CDK9 antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1x10^6 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.