

For Research Use Only

CDK9 Recombinant antibody, PBS Only (Detector)

Catalog Number: 83662-2-PBS



Basic Information

Catalog Number: 83662-2-PBS	GenBank Accession Number: BC001968	Purification Method: Protein A purification
Size: 100ug , Concentration: 1 mg/ml by Nanodrop;	GeneID (NCBI): 1025	CloneNo.: 240600E3
Source: Rabbit	UNIPROT ID: P50750	
Isotype: IgG	Full Name: cyclin-dependent kinase 9	
Immunogen Catalog Number: AG2318	Calculated MW: 372 aa, 43 kDa	
	Observed MW: 38-42 kDa, 55 kDa	

Applications

Tested Applications:
WB, IHC, IF/ICC, FC (Intra), Cytometric bead array, Sandwich ELISA, Indirect ELISA, Sample test

Species Specificity:
human

Product Information

83662-2-PBS targets CDK9 as part of a matched antibody pair:

MP00630-2: 83662-5-PBS capture and 83662-2-PBS detection (validated in Cytometric bead array)

MP00630-4: 83662-6-PBS capture and 83662-2-PBS detection (validated in Sandwich ELISA)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

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

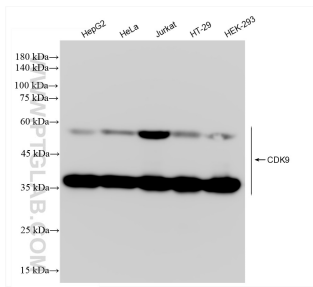
Storage:
Store at -80°C.

Storage Buffer:
PBS Only

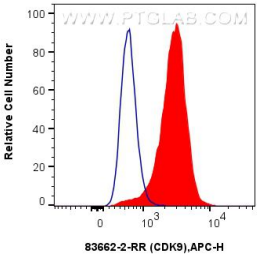
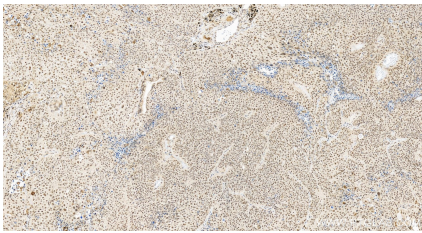
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

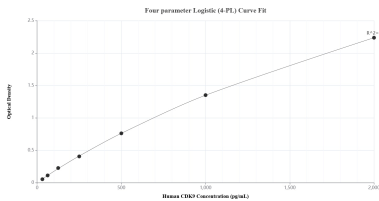
Selected Validation Data



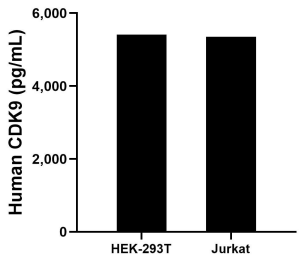
Various lysates were subjected to SDS PAGE followed by western blot with 83662-2-RR (CDK9 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83662-2-PBS in a different storage buffer formulation.



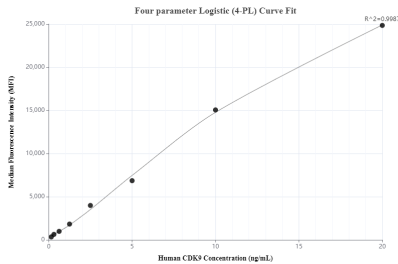
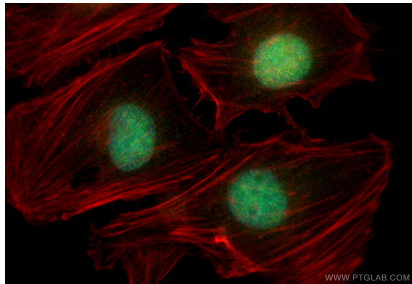
1x10⁶ HeLa cells were intracellularly stained with 0.25 ug CDK9 Recombinant antibody (83662-2-RR, Clone:240600E3) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set. This data was developed using the same antibody clone with 83662-2-PBS in a different storage buffer formulation.



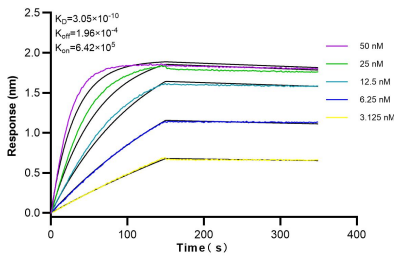
Sandwich ELISA standard curve of MP00630-4, Human CDK9 Recombinant Matched Antibody Pair - PBS only. 83662-6-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag2318. 83662-2-PBS was HRP conjugated as the detection antibody. Range: 31.3-2000 pg/mL.



The mean CDK9 concentration was determined to be 5,413.5 pg/mL in HEK-293T cell extract based on a 5.8 mg/mL extract load and 5,349.7 Pg/mL in Jurkat cell extract based on a 1.5 mg/mL extract load.



Cytometric bead array standard curve of MP00630-2, CDK9 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83662-5-PBS. Detection antibody: 83662-2-PBS. Standard: Ag2318. Range: 0.156-20 ng/mL.



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