

For Research Use Only

# CDK2 Recombinant antibody, PBS Only (Capture/Detector)

Catalog Number:83635-2-PBS



## Basic Information

<b>Catalog Number:</b> 83635-2-PBS	<b>GenBank Accession Number:</b> BC003065	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug , Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 1017	<b>CloneNo.:</b> 240580G11
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P24941	
<b>Isotype:</b> IgG	<b>Full Name:</b> cyclin-dependent kinase 2	
<b>Immunogen Catalog Number:</b> AG17133	<b>Calculated MW:</b> 298 aa, 34 kDa	
	<b>Observed MW:</b> 30-33 kDa	

## Applications

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

**Species Specificity:**  
human, rat

## Product Information

83635-2-PBS targets CDK2 as part of a matched antibody pair:

MP00611-1: 83635-3-PBS capture and 83635-2-PBS detection (validated in Cytometric bead array)

MP00611-2: 83635-2-PBS capture and 83635-1-PBS detection (validated in Cytometric bead array)

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

CDK2(Cyclin-dependent kinase 2) is also named as CDKN2 and belongs to the protein kinase superfamily,CMGC Ser/Thr protein kinase family, CDC2/CDKX subfamily.It is involved in the control of the cell cycle; essential for meiosis, but dispensable for mitosis.It has 2 isoforms produced by alternative splicing.

## Storage

**Storage:**  
Store at -80°C.  
**Storage Buffer:**  
PBS Only

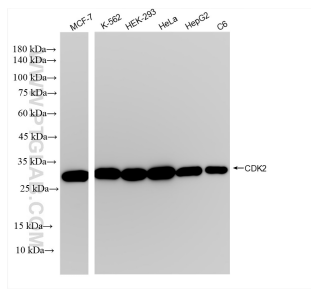
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free  
in USA), or 1(312) 455-8498 (outside USA)

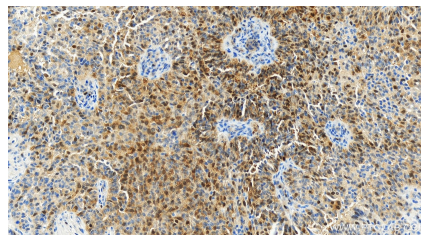
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

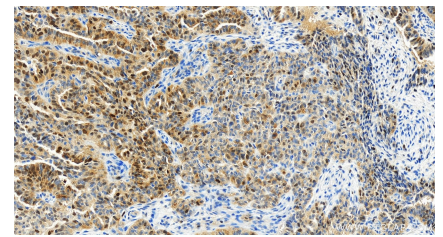
## Selected Validation Data



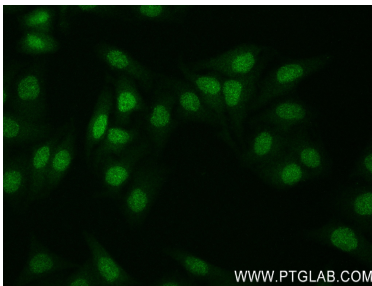
Various lysates were subjected to SDS PAGE followed by western blot with 83635-2-RR (CDK2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83635-2-PBS in a different storage buffer formulation.



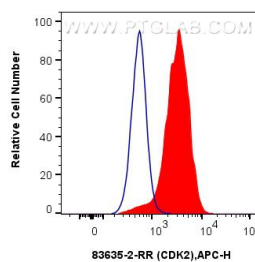
Immunohistochemical analysis of paraffin-embedded human ovarian cancer slide using 83635-2-RR (CDK2 antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83635-2-PBS in a different storage buffer formulation.



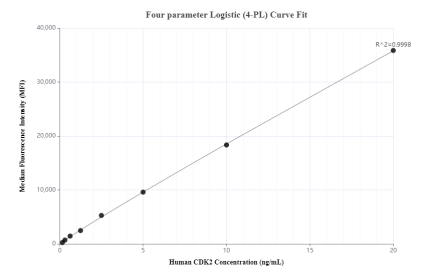
Immunohistochemical analysis of paraffin-embedded human ovarian cancer slide using 83635-2-RR (CDK2 antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83635-2-PBS in a different storage buffer formulation.



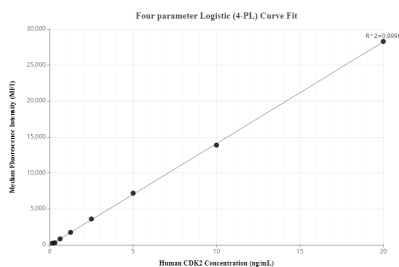
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using CDK2 antibody (83635-2-RR, Clone: 240580G11) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 83635-2-PBS in a different storage buffer formulation.



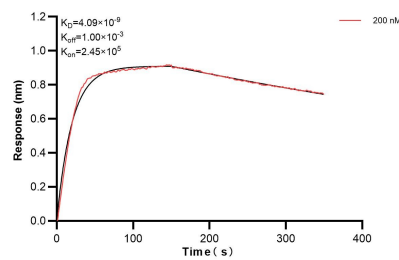
$1 \times 10^6$  HeLa cells were intracellularly stained with 0.25  $\mu$ g CDK2 Recombinant antibody (83635-2-RR, Clone:240580G11) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)(red), or 0.25  $\mu$ g Isotype Control (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set. This data was developed using the same antibody clone with 83635-2-PBS in a different storage buffer formulation.



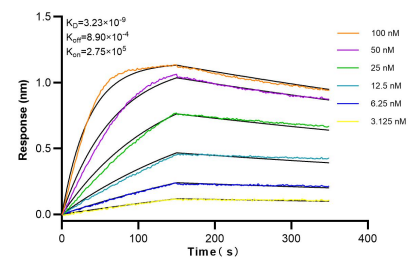
Cytometric bead array standard curve of MP00611-1, CDK2 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83635-3-PBS. Detection antibody: 83635-2-PBS. Standard: Ag17133. Range: 0.156-20 ng/mL.



Cytometric bead array standard curve of MP00611-2, CDK2 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83635-2-PBS. Detection antibody: 83635-1-PBS. Standard: Ag17133. Range: 0.156-20 ng/mL.



Biolayer interferometry (BLI) kinetic assay of 83635-2-PBS against Human CDK2 was performed. The affinity constant is 4.09 nM.



Biolayer interferometry (BLI) kinetic assays of 83635-2-RR against Human CDK2 were performed. The affinity constant is 3.23 nM.