

For Research Use Only

# Cyclin D1 Recombinant antibody, PBS Only (Detector)

Catalog Number: 82681-1-PBS



## Basic Information

<b>Catalog Number:</b> 82681-1-PBS	<b>GenBank Accession Number:</b> BC000076	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug , Concentration: 1mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 595	<b>CloneNo.:</b> 6B10
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P24385	
<b>Isotype:</b> IgG	<b>Full Name:</b> cyclin D1	
<b>Immunogen Catalog Number:</b> AG25384	<b>Calculated MW:</b> 295 aa, 34 kDa	
	<b>Observed MW:</b> 34 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, Sandwich ELISA, Indirect ELISA, Sample test

**Species Specificity:**  
human, mouse, rat

## Product Information

82681-1-PBS targets Cyclin D1 as part of a matched antibody pair:

MP80003-1: 68790-1-PBS capture and 82681-1-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

CCND1 (cyclin D1), also known as PRAD1 or BCL1, belongs to the highly conserved cyclin family, whose members are characterized by a dramatic periodicity in protein abundance throughout the cell cycle. CCND1 forms a complex with and functions as a regulatory subunit of CDK4 or CDK6, whose activity is required for cell cycle G1/S transition. The CCND1 gene, located on 11q13 has been reported to be overexpressed in mantle cell lymphoma (MCL) due to the chromosomal translocation. CCND1 has been shown to interact with tumor suppressor protein Rb and the expression of this gene is regulated positively by Rb. Over-expression of CCND1 is known to correlate with the early onset of cancer and risk of tumor progression and metastasis.

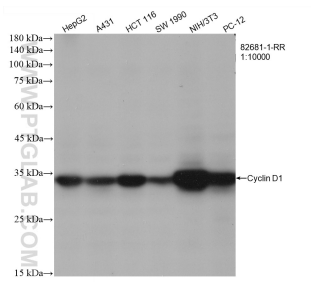
## Storage

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

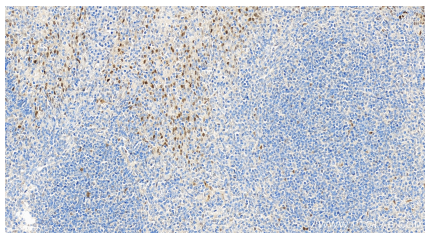
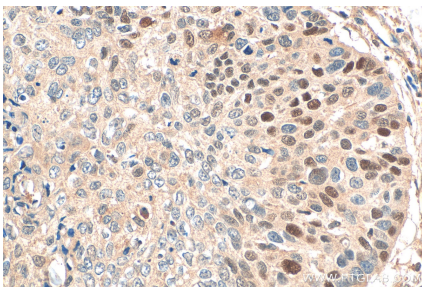
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

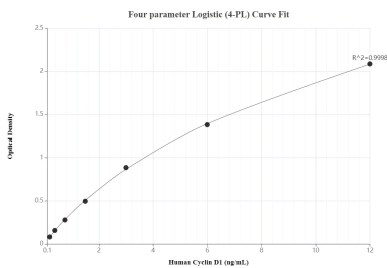
## Selected Validation Data



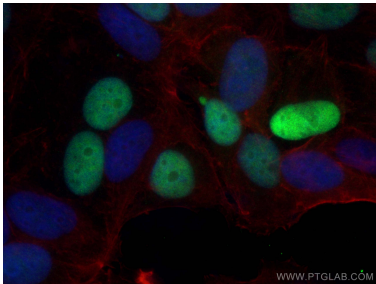
Various lysates were subjected to SDS PAGE followed by western blot with 82681-1-RR (Cyclin D1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 82681-1-PBS in a different storage buffer formulation.



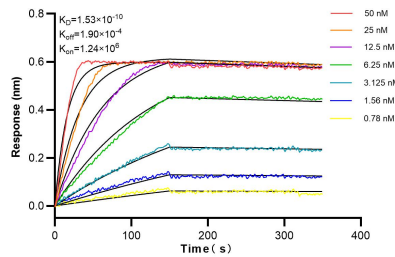
Immunohistochemical analysis of paraffin-embedded human tonsillitis tissue slide using 82681-1-RR (Cyclin D1 antibody) at dilution of 1:1000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 82681-1-PBS in a different storage buffer formulation.



Sandwich ELISA standard curve of MP80003-1, Cyclin D1 Hybrid Matched Antibody Pair, PBS Only. Capture antibody: 68790-1-PBS. Detection antibody: 82681-1-PBS. Standard: Ag25384. Range: 0.188-12 ng/mL.



Immunofluorescent analysis of (4% PFA) fixed MCF-7 cells using Cyclin D1 antibody (82681-1-RR, Clone: 6B10) at dilution of 1:2000 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-phalloidin (red). This data was developed using the same antibody clone with 82681-1-PBS in a different storage buffer formulation.



Biolayer interferometry (BLI) kinetic assays of 82681-1-RR against Human Cyclin D1 were performed. The affinity constant is 0.153 nM.