

Datasheet for ABIN5706819

## anti-Cyclin D3 antibody (C-Term)



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### 4 Images

#### Overview

Quantity:	100 µg
Target:	Cyclin D3 (CCND3)
Binding Specificity:	C-Term
Reactivity:	Human, Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Cyclin D3 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC), Flow Cytometry (FACS), Immunoprecipitation (IP)

#### Product Details

Purpose:	Cyclin D3 Antibody
Immunogen:	Immunogen: This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to the C-terminal domain of mouse Cyclin D3 protein. Immunogen Type: Conjugated Peptide
Isotype:	IgG
Cross-Reactivity (Details):	Cyclin D3 affinity-purified antibody is directed against Cyclin D3 protein.
Characteristics:	Synonyms: rabbit anti-Cyclin D3 antibody, G1/S-specific cyclin-D3, Ccnd3, Cyl-3
Purification:	The product was affinity purified from monospecific antiserum by immunoaffinity purification.

## Product Details

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Sterility: Sterile filtered

## Target Details

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Target: Cyclin D3 (CCND3)

Alternative Name: Ccnd3 ([CCND3 Products](#))

Background: Background: Anti-Cyclin D3 antibody was designed, produced, and validated as part of the Joy Cappel Young Investigator Award (JCYIA). Cyclin D3 belongs to a highly conserved cyclin family, whose members are the ultimate recipients of oncogenic signals. Cyclin D3 is a key component of the cell cycle progression machinery and induces progression through the G1 phase of the cell cycle. Cyclin D3 is expressed in nearly all proliferating cells, and shows the most broad expression pattern of all three D-type (D1-D3) cyclins. Cyclin D3 is encoded from the 6p21 chromosome region and the protein is predominantly localized in the nucleus. Once induced, cyclin D3 binds and activates its associated cyclin-dependent kinases CDK4 and CDK6. Amplification of the cyclin D3 gene and overexpression of cyclin D3 protein is seen in several human cancers. A large number of human malignancies contain lesions in pathways impacting on cyclin D3. Abnormal expression of Cyclin D3 is believed to be a driving force in several human cancers. A possible role for cyclin D3 in the malignancies of the lymphoid system is suggested by the observations that cyclin D3 gene is rearranged in several neoplastic diseases such as diffuse large B cell lymphomas or multiple myelomas. Anti-Cyclin D3 is ideal for researchers interested in Cancer Research and Immunology research.

Gene ID: 12445

UniProt: [P30282](#)

Pathways: [Cell Division Cycle](#), [Mitotic G1-G1/S Phases](#), [Glycosaminoglycan Metabolic Process](#)

## Application Details

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Application Notes: Flow Cytometry Dilution: 4 µg/mL  
Immunohistochemistry Dilution: 4 µg/mL  
Application Note: This affinity purified antibody has been tested for use in ELISA, immunohistochemistry, flow cytometry, and by immunoprecipitation. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 32.4 kDa in size corresponding to Cyclin D3 protein by western blotting in the appropriate stimulated tissue or cell lysate or extract. ELISA and western blot show equivalent reactivity against phosphorylated and non-phosphorylated Cyclin D3.

## Application Details

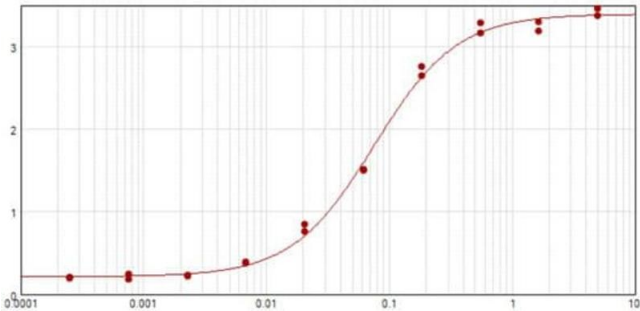
Western Blot Dilution: 1.0 µg/mL  
Immunoprecipitation Dilution: 5 µg/mL  
ELISA Dilution: 1:1000 - 1:5000

Restrictions: For Research Use only

## Handling

Format:	Liquid
Concentration:	1.0 mg/mL
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: None Preservative: 0.01 % (w/v) Sodium Azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiry Date:	12 months

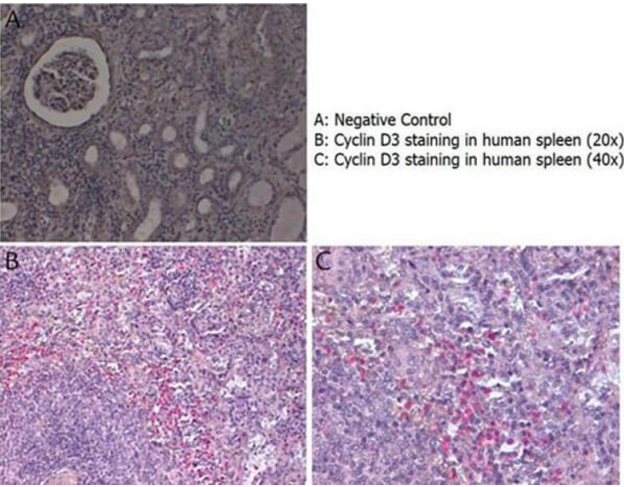
## Images



### ELISA

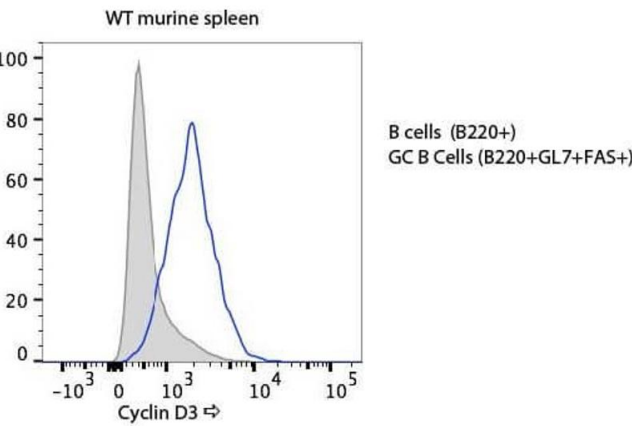
**Image 1.** ELISA results of purified Rabbit Anti-Cyclin D3 Antibody tested against BSA-conjugated peptide of cyclin D3 peptide. Each well was coated in duplicate with 0.1 µg of conjugate (red line). The starting dilution of antibody was 5 µg/mL and the X-axis represents the Log10 of a 3-fold dilution. This titration is a 4-parameter curve fit where the IC50 is defined as the titer of the antibody. Assay performed using Blocking buffer (p/n MB-060-1000), Goat Anti-Rabbit

IgG HRP conjugated (p/n 611-103-122) and TMB substrate (p/n TMBE-1000).



### Immunohistochemistry

**Image 2.** Immunohistochemistry with anti-Cyclin D3 antibody showing Cyclin D3 staining in nucleus of lymphocytes in human spleen at 20x and 40x (B & C). Formalin fixed/paraffin embedded sections were subjected to heat induced epitope retrieval (HIER) at pH 6.2 and then incubated with rabbit anti-mouse Cyclin D3 antibody at 4.0  $\mu$ g/mL for 60 minutes. The reaction was developed using MACH 4 universal AP polymer detection system and visualized with WARP RED.



### Flow Cytometry

**Image 3.** Flow Cytometry of Rabbit anti-Cyclin D3 antibody. Cells: mouse B cells+, 14 days post immunization (NP-CGG). Anti-Cyclin D3-RPE antibody at 1:500 for 20 min at 4  $^{\circ}$ C.

Please check the [product details page](#) for more images. Overall 4 images are available for ABIN5706819.