

Rabbit CCND3 Polyclonal Antibody | anti-CCND3 antibody

CCND3 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA326010	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

CCND3; Polyclonal Antibody; CCND3 Antibody; CCND 3; Ccnd3; CCND3_HUMAN; CyclinD3; D3 type cyclin; G1 S specific cyclin D3; G1/S specific cyclin D3; G1/S-specific cyclin-D3; anti-CCND3 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	CCND3 antibody detects endogenous levels of total CCND3
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	211
Applicable Applications for anti-CCND3 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human CCND3
Subcellular Location	Nucleus. Cytoplasm. Membrane. Cyclin D-CDK4 complexes accumulate at the nuclear membrane and are then translocated to the nucleus through interaction with KIP/CIP family members.
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



WB (Western Blot)

Western blot analysis of K562 lysate using CCND3 antibody. The lane on the left is treated with the antigen-specific peptide.



IF (Immunofluorescence)

AAA326010 staining HepG2 by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.



IHC (Immunohistochemistry)

AAA326010 at 1/100 staining Mouse brain tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

Related Product Information for anti-CCND3 antibody	Description: Activity of the cyclin-dependent kinases CDK4 and CDK6 is regulated by T-loop phosphorylation, by the abundance of their cyclin partners (the D-type cyclins), and by association with CDK inhibitors of the Cip/Kip or INK family of proteins (1). The inactive ternary complex of cyclin D/CDK4 and p27 Kip1 requires extracellular mitogenic stimuli for the release and degradation of p27 concomitant with a rise in cyclin D levels to affect progression through the restriction point and Rb-dependent entry into S-phase (2). The active complex of cyclin D/CDK4 targets the retinoblastoma protein for phosphorylation, allowing the release of E2F transcription factors that activate G1/S-phase gene expression (3). Levels of cyclin D protein drop upon withdrawal of growth factors through downregulation of protein expression and phosphorylation-dependent degradation (4). Although the D-type cyclins are not fully redundant, cyclin D3, like D1, plays a prominent role in differentiation and proliferation, which correlates with higher expression levels of cyclin D3 in various cancers (5). Function: Regulatory component of the cyclin D3-CDK4 (DC) complex that phosphorylates and inhibits members of the retinoblastoma (RB) protein family including RB1 and regulates the cell-cycle during G1/S transition. Phosphorylation of RB1 allows dissociation of the transcription factor E2F from the RB/E2F complex and the subsequent transcription of E2F target genes which are responsible for the progression through the G1 phase. Hypophosphorylates RB1 in early G1 phase. Cyclin D-CDK4 complexes are major integrators of various mitogenic and antimitogenic signals. Also substrate for SMAD3, phosphorylating SMAD3 in a cell-cycle-dependent manner and repressing its transcriptional activity. Component of the ternary complex, cyclin D3/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex. Subunit Structure: Interacts with the CDK4 and CDK6 protein kinases to form a serine/threonine kinase holoenzyme complex. The cyclin subunit imparts substrate specificity to the complex. Interacts with ATF5. Interacts with EIF3K. Component of the ternary complex cyclin D/CDK4/CDKN1B required for nuclear translocation and modulation of CDK4-mediated kinase activity. Can form similar complexes with either CDKN1A or CDKN2A. Post-translational Modifications: Polyubiquitinated by the SCF(FBXL2) complex, leading to proteasomal degradation. Similarity: Belongs to the cyclin family. Cyclin D subfamily.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	209862835
NCBI GeneID	896
NCBI Accession #	NP_001129489.1
NCBI GenBank Nucleotide #	NM_001136017.3
UniProt Accession #	P30281; Q5T8J0; Q6FG62; Q96F49; B2RD63; B3KQ22; E9PAS4; E9PB36
Molecular Weight	Observed: 33 kDa Predicted: 33 kDa
NCBI Official Full Name	G1/S-specific cyclin-D3 isoform 1
NCBI Official Synonym Full Names	cyclin D3
NCBI Official Symbol	CCND3
NCBI Protein Information	G1/S-specific cyclin-D3
UniProt Protein Name	G1/S-specific cyclin-D3
UniProt Gene Name	CCND3

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/ccnd3-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/326010>