CCND2 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	CCND2, Polyclonal Antibody
Full Product Name	CCND2 Rabbit pAb
Product Gene Name	anti-CCND2 antibody
Product Synonym Names	MPPH3; KIAK0002
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Form/Format	PBS with 0.02% Sodium Azide, 50% Glycerol, pH 7.3.
Purity/Purification	Affinity Purified
Preparation and Storage	Store at -20 degree C. Avoid freeze/thaw cycles.
Molecular Weight	37kDa
OMIM	123833
3D Structure	ModBase 3D Structure for P30279
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 1-289 of human CCND2 (NP_001750.1).
Cellular Localization	Cytoplasm, Membrane, Nucleus
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-CCND2 antibody	Western Blot (WB), Immunohistochemistry (IHC), Immunofluorescence (IF)
Application Notes for anti-CCND2 antibody	WB: 1:500-1:2000 IHC: 1:50-1:100 IF: 1:50-1:100
Related Product Information for anti-CCND2 antibody	Regulatory component of the cyclin D2-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 D2/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex.
Other Notes	Small volumes of anti-CCND2 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for CCND2 purchase	MBS8544574 is an antibody targeting CCND2. Also known as CCND2 Rabbit pAb. Reactive in Human, Mouse, Rat. Host: Rabbit.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CCND2. It may not necessarily be applicable to this product.

NCBI GI #	4502617
NCBI GeneID	894
NCBI Accession #	NP_001750.1
UniProt Primary Accession #	P30279
UniProt Related Accession #	P30279
GenBank Nucleotide #	NP_001750.1
NCBI Official Full Name	G1/S-specific cyclin-D2
NCBI Official Synonym Full Names	cyclin D2
NCBI Official Symbol	CCND2
NCBI Official Synonym Symbols	MPPH3; KIAK0002
UniProt Protein Name	G1/S-specific cyclin-D2
Protein Family	G1/S-specific cyclin
UniProt Gene Name	CCND2
UniProt Entry Name	CCND2_HUMAN
NCBI Protein Information	G1/S-specific cyclin-D2
NCBI Summary for CCND2	The protein encoded by this gene belongs to the highly conserved cyclin family, whose members are characterized by a dramatic periodicity in protein abundance through the cell cycle. Cyclins function as regulators of CDK kinases. Different cyclins exhibit distinct expression and degradation patterns which contribute to the temporal coordination of each mitotic event. This cyclin forms a complex with CDK4 or CDK6 and functions as a regulatory subunit of the complex, whose activity is required for cell cycle G1/S transition. This protein has been shown to interact with and be involved in the phosphorylation of tumor suppressor protein Rb. Knockout studies of the homologous gene in mouse suggest the essential roles of this gene in ovarian granulosa and germ cell proliferation. High level expression of this gene was observed in ovarian and testicular tumors. Mutations in this gene are associated with megalencephaly-polymicrogyria-polydactyly-hydrocephalus syndrome 3 (MPPH3). [provided by RefSeq, Sep 2014]
UniProt Comments for CCND2	CCND2: Regulatory component of the cyclin D2-CDK4 (DC) complex that phosphorylates and inhibits members of the retinoblastoma (RB) protein family including RB1 and regulates the cell-cycle during G(1)/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 G(1) phase. Hypophosphorylates RB1 in early G(1) phase. Cyclin D-CDK4 complexes are major integrators of various mitogenenic 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 D2/CDK4/p27Kip1, required for nuclear translocation and activity of the cyclin D-CDK4 complex. Interacts with either CDK4 or CDK6 protein kinase to form a serine/threonine kinase holoenzyme complex. The cyclin subunit imparts substrate specificity to the complex. Component of the ternary complex cyclin D/CDK4/p27Kip1 required for nuclear translocation and modulation of CDK4-mediated kinase activity. Belongs to the cyclin family. Cyclin D subfamily. Protein type: Motility/polarity/chemotaxis; Cell cycle regulation Chromosomal Location of Human Ortholog: 12p13 Cellular Component: nucleoplasm; nuclear membrane; cyclin-dependent protein kinase holoenzyme complex; nucleolus; cytosol; chromatin; nucleus Molecular Function: protein binding; protein kinase binding Biological Process: positive regulation of cyclin-dependent protein kinase activity; cell division; positive regulation of protein amino acid phosphorylation; cell cycle Disease: Megalencephaly-polymicrogyria-polydactyly-hydrocephalus Syndrome 3

Research Articles on CCND2	**1.** The role and regulation of UCA1/miR-204/CCND2 regulatory axis in pCGs.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/polyclonal-human-mouse-rat-antibody/ccnd2/8544574