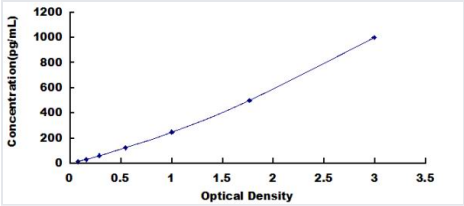
Cyclin D2 (CCND2) ELISA Kit for Human

PRODUCT OVERVIEW

Product Name	Cyclin D2 (CCND2), ELISA Kit
Full Product Name	Human Cyclin D2 (CCND2) ELISA Kit
Product Gene Name	CCND2 elisa kit
Product Synonym Names	CCN-D2; G1/S-Specific Cyclin-D2
Species Reactivity	Human
Assay Type	Sandwich
Samples	Tissue Homogenates, Cell Lysates or Other Biological Fluids.
Detection Range	15.6-1000pg/mL
Sensitivity	5.7pg/mL
Preparation and Storage	For unopened kits: All the reagents should be kept at 4 degree C upon receipt. For opened kits: Once the kit is opened, the remaining reagents still need to be stored according to the above storage conditions. In addition, return the unused wells to the foil pouch containing the desiccant pack and reseal along entire edge of zip-seal.
Molecular Weight	24,461 Da
OMIM	123833
3D Structure	ModBase 3D Structure for P30279
RTU ELISA Kit's Advantage	The Ready-To-Use (RTU) Kits require fewer steps in setup and take less time to run. Detection Solutions are pre-diluted and total incubation time is shorter than many other ELISA Kits.
ISO Certification	Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory.
Related Product Information for CCND2 elisa kit	Test Principle: The microtiter plate provided in this kit has been pre-coated with an antibody specific to CCND2. Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody preparation specific to CCND2. Next, Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. After TMB substrate solution is added, only those wells that contain CCND2, biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450nm ± 10nm. The concentration of CCND2 in the samples is then determined by comparing the O.D. of the samples to the standard curve.
Other Notes	Small volumes of CCND2 elisa kit 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	MBS458200 is a ready-to-use microwell, strip-or-full plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Cyclin D2 (CCND2) ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing CCND2. The ELISA analytical biochemical technique of the MBS458200 kit is based on CCND2 antibody-CCND2 antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect CCND2 antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, CCND2. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).



Typical Testing Data/Standard Curve (for reference only) of CCND2 elisa kit

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 Secondary Accession #	Q13955; Q5U035; A8K531
UniProt Related Accession #	P30279
GenBank Nucleotide #	NM_001759.3
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
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	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 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/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex ().
Research Articles on CCND2	**1.** data indicate that linc00598 plays an important role in cell cycle regulation and proliferation through its ability to regulate the transcription of CCND2.

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