CDK2 Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	CDK2, Polyclonal Antibody
Full Product Name	CDK2, CT (CDK2, CDKN2, Cyclin-dependent kinase 2, Cell division protein kinase 2, p33 protein kinase) (MaxLight 650)
Product Gene Name	anti-CDK2 antibody
Product Synonym Names	CDK2; CDKN2; Cyclin-dependent kinase 2; Cell division protein kinase 2; p33 protein kinase
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human
Form/Format	Supplied as a liquid in PBS, pH 7.2. No preservative added. Labeled with MaxLight650.
Purity/Purification	Purified by Protein G Affinity Chromatography.
Preparation and Storage	Store product at 4 degree C in the dark. DO NOT FREEZE! Stable at 4 degree C for 12 months after receipt as an undiluted liquid. Dilute required amount only prior to immediate use. Further dilutions can be made in assay buffer. Caution: MaxLight650 conjugates are sensitive to light. For maximum recovery of product, centrifuge the original vial prior to removing the cap.
Molecular Weight	33,930 Da
Chromosome Location	Chromosome: 12; NC_000012.11 (56360556..56366568). Location: 12q13
OMIM	116953
3D Structure	ModBase 3D Structure for P24941
Immunogen	CDK2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 238~267 amino acids from the C-terminal region of human CDK2.
Conjugate	MaxLight650
Note	Preservative Free
Product Categories/Family for anti-CDK2 antibody	Antibodies; Protein Kinases
Applications Tested/Suitable for anti-CDK2 antibody	Flow Cytometry (FC/FACS), FLISA, Immunohistochemistry (IHC), Western Blot (WB)
Application Notes for anti-CDK2 antibody	FC/FACS: 1:10-50 FLISA: 1:1,000 IHC: 1:50-100 WB: 1:100-500 Applications are based on unconjugated antibody.
Related Product Information for anti-CDK2 antibody	CDK2 is a member of the Ser/Thr protein kinase family. This protein kinase is highly similar to the gene products of S. cerevisiae cdc28, and S. pombe cdc2. It is a catalytic subunit of the cyclin-dependent protein kinase complex, whose activity is restricted to the G1-S phase, and essential for cell cycle G1/S phase transition. This protein associates with and regulated by the regulatory subunits of the complex including cyclin A or E, CDK inhibitor p21Cip1 (CDKN1A) and p27Kip1 (CDKN1B). Its activity is also regulated by its protein phosphorylation.

Product References and Citations for anti-CDK2 antibody	Moshinsky, D.J., et al., Biochem. Biophys. Res. Commun. 310(3):1026-1031 (2003). Chow, J.P., et al., J. Biol. Chem. 278(42):40815-40828 (2003). O'Nions, J., et al., Oncogene 22(46):7181-7191 (2003). Yun, J., et al., J. Biol. Chem. 278(38):36966-36972 (2003). Izumiya, Y., et al., J. Virol. 77(17):9652-9661 (2003).
Other Notes	Small volumes of anti-CDK2 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 CDK2 purchase	MBS6284333 is an antibody targeting CDK2. Also known as CDK2, CT (CDK2, CDKN2, Cyclin-dependent kinase 2, Cell division protein kinase 2, p33 protein kinase) (MaxLight 650). Reactive in Human. Host: Rabbit.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CDK2. It may not necessarily be applicable to this product.

NCBI GI #	16936528
NCBI GeneID	1017
NCBI Accession #	NP_001789.2
UniProt Primary Accession #	P24941
UniProt Secondary Accession #	O75100; A8K7C6
UniProt Related Accession #	P24941
GenBank Nucleotide #	NM_001798.3
NCBI Official Full Name	cyclin-dependent kinase 2 isoform 1
NCBI Official Synonym Full Names	cyclin-dependent kinase 2
NCBI Official Symbol	CDK2
NCBI Official Synonym Symbols	p33(CDK2)
UniProt Protein Name	Cyclin-dependent kinase 2
UniProt Synonym Protein Names	Cell division protein kinase 2; p33 protein kinase
Protein Family	Cyclin-dependent kinase
UniProt Gene Name	CDK2
UniProt Synonym Gene Names	CDKN2
UniProt Entry Name	CDK2_HUMAN
NCBI Protein Information	cyclin-dependent kinase 2; p33 protein kinase; cell devision kinase 2; cdc2-related protein kinase; cell division protein kinase 2
NCBI Summary for CDK2	The protein encoded by this gene is a member of the Ser/Thr protein kinase family. This protein kinase is highly similar to the gene products of S. cerevisiae cdc28, and S. pombe cdc2. It is a catalytic subunit of the cyclin-dependent protein kinase complex, whose activity is restricted to the G1-S phase, and essential for cell cycle G1/S phase transition. This protein associates with and regulated by the regulatory subunits of the complex including cyclin A or E, CDK inhibitor p21Cip1 (CDKN1A) and p27Kip1 (CDKN1B). Its activity is also regulated by its protein phosphorylation. Two alternatively spliced variants and multiple transcription initiation sites of this gene have been reported. [provided by RefSeq, Jul 2008]

UniProt Comments for CDK2	CDK2: a protein kinase of the CDK family. An important component of the cell cycle machinery. Activity of CDK2 is maximal during S phase and G2. Cdk2/cyclin E kinase activity is important for the G1 to S transition and phosphorylates the Rb protein. In S-phase, active cdk2/cyclin A complexes predominate and phosphorylate E2F, and the active cdk2 complex persists in the nucleus through G2. Part of the Rb pathway disregulated in most tumors. Target of several candidate cancer drugs. However, inhibition does not always prevent cancer cell growth, possibly due to CDK redundancy. Inhibitors: BMS-265246, BMS-265246-01, R-roscovitine (CYC200, CYC202), SU9516, R547, L868276 Protein type: Protein kinase, CMGC; EC 2.7.11.22; Protein kinase, Ser/Thr (non-receptor); Cell cycle regulation; Kinase, protein; CMGC group; CDK family; CDK1 subfamily; CDK/CDK1 subfamily Chromosomal Location of Human Ortholog: 12q13 Cellular Component: nucleoplasm; Y chromosome; Cajal body; centrosome; chromosome, telomeric region; transcription factor complex; X chromosome; cytoplasm; cyclin-dependent protein kinase holoenzyme complex; condensed chromosome; nucleus; cytosol; endosome Molecular Function: cyclin binding; protein binding; cyclin-dependent protein kinase activity; metal ion binding; histone kinase activity; ATP binding Biological Process: G1 DNA damage checkpoint; mitosis; meiosis; histone phosphorylation; positive regulation of transcription, DNA-dependent; DNA repair; DNA damage response, signal transduction by p53 class mediator resulting in cell cycle arrest; peptidyl-serine phosphorylation; regulation of ubiquitin-protein ligase activity during mitotic cell cycle; cell division; anaphase-promoting complex-dependent proteasomal ubiquitin-dependent protein catabolic process; Ras protein signal transduction; positive regulation of cell proliferation; mitotic cell cycle; blood coagulation; DNA replication; G2/M transition of mitotic cell cycle; centrosome duplication; potassium ion transport; positive regulation of DNA replication initiation; G1/S transition of mitotic cell cycle
Research Articles on CDK2	**1.** the up-regulation of CDK2 by CUL4B is achieved via the repression of miR-372 and miR-373, which target CDK2.
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-antibody/cdk2/6284333