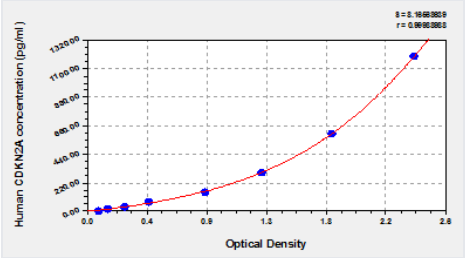
Cyclin-Dependent Kinase Inhibitor 2a (Melanoma, P16, Inhibits CDK4) (CDKN2A) ELISA Kit for Human

PRODUCT OVERVIEW

Product Name	cyclin-dependent kinase inhibitor 2A (melanoma, p16, inhibits CDK4) (CDKN2A), ELISA Kit
Full Product Name	Human Cyclin-dependent kinase inhibitor 2A, isoforms 1/2/3, CDKN2A ELISA Kit
Product Gene Name	CDKN2A elisa kit
Product Synonym Names	Human Cyclin-dependent kinase inhibitor 2A; isoforms 1/2/3 (CDKN2A) ELISA kit; ARF; CDK4I; CDKN2; CMM2; INK4; INK4a; MLM; MTS1; TP16; p14; p14ARF; p16; p16INK4; p16INK4a; p19; p19Arf; CDK4 inhibitor p16-INK4; OTTHUMP00000021148; cell cycle negative regulator beta; cyclin-dependen; cyclin-dependent kinase inhibitor 2A (melanoma; p16; inhibits CDK4)
Species Reactivity	Human
Assay Type	Quantitative Sandwich
Samples	Serum, plasma, tissue homogenates, cell lysates
Detection Range	18.75 pg/ml-1200 pg/ml
Sensitivity	< 4.69 pg/ml
Specificity	This assay has high sensitivity and excellent specificity for detection of human CDKN2A. No significant cross-reactivity or interference between human CDKN2A and analogues was observed.
Preparation and Storage	Unopened test kits should be stored at 2 to 8 degree C upon receipt. Please refer to pdf manual for further storage instructions.
Inter-assay Precision	Inter-assay Precision (Precision between assays): CV%<10%. Three samples of known concentration were tested in twenty assays to assess.
Intra-assay Precision	Intra-assay Precision (Precision within an assay): CV%<8%. Three samples of known concentration were tested twenty times on one plate to assess.
Molecular Weight	16,533 Da
OMIM	gene 606719
3D Structure	ModBase 3D Structure for P42771
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Related Product Information for CDKN2A elisa kit	Principle of the Assay: This assay employs the quantitative sandwich enzyme immunoassay technique. Antibody specific for CDKN2A has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any CDKN2A present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for CDKN2A is added to the wells. After washing, avidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of CDKN2A bound in the initial step. The color development is stopped and the intensity of the color is measured.
Other Notes	Small volumes of CDKN2A 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 CDKN2A purchase	MBS706339 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the cyclin-dependent kinase inhibitor 2A (melanoma, p16, inhibits CDK4) (CDKN2A) 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 CDKN2A. The ELISA analytical biochemical technique of the MBS706339 kit is based on CDKN2A antibody-CDKN2A antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect CDKN2A antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, CDKN2A. 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 CDKN2A elisa kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CDKN2A. It may not necessarily be applicable to this product.

NCBI GI #	4502749
NCBI GeneID	1029
NCBI Accession #	NP_000068.1
UniProt Primary Accession #	P42771
UniProt Secondary Accession #	O95440; Q15191; Q5VVJ5; Q96B52; Q9NP05; A5X2G7; D3DRK1
UniProt Related Accession #	P42771; Q8N726
GenBank Nucleotide #	NM_000077.4
NCBI Official Full Name	cyclin-dependent kinase inhibitor 2A isoform p16INK4a
NCBI Official Synonym Full Names	cyclin-dependent kinase inhibitor 2A
NCBI Official Symbol	CDKN2A
NCBI Official Synonym Symbols	ARF; MLM; P14; P16; P19; CMM2; INK4; MTS1; TP16; CDK4I; CDKN2; INK4A; MTS-1; P14ARF; P19ARF; P16INK4; P16INK4A; P16-INK4A
UniProt Protein Name	Cyclin-dependent kinase inhibitor 2A, isoforms 1/2/3
UniProt Synonym Protein Names	Cyclin-dependent kinase 4 inhibitor A; CDK4I; Multiple tumor suppressor 1; MTS-1; p16-INK4a; p16-INK4; p16INK4A
Protein Family	Cyclin-dependent kinase inhibitor
UniProt Gene Name	CDKN2A
UniProt Synonym Gene Names	CDKN2; MTS1; CDK4I; MTS-1; p16-INK4; p16INK4A
UniProt Entry Name	CD2A1_HUMAN
NCBI Protein Information	cyclin-dependent kinase inhibitor 2A; CDK4 inhibitor p16-INK4; multiple tumor suppressor 1; cell cycle negative regulator beta; cyclin-dependent kinase 4 inhibitor A; cyclin-dependent kinase inhibitor 2A (melanoma, p16, inhibits CDK4)

NCBI Summary for CDKN2A	This gene generates several transcript variants which differ in their first exons. At least three alternatively spliced variants encoding distinct proteins have been reported, two of which encode structurally related isoforms known to function as inhibitors of CDK4 kinase. The remaining transcript includes an alternate first exon located 20 Kb upstream of the remainder of the gene; this transcript contains an alternate open reading frame (ARF) that specifies a protein which is structurally unrelated to the products of the other variants. This ARF product functions as a stabilizer of the tumor suppressor protein p53 as it can interact with, and sequester, the E3 ubiquitin-protein ligase MDM2, a protein responsible for the degradation of p53. In spite of the structural and functional differences, the CDK inhibitor isoforms and the ARF product encoded by this gene, through the regulatory roles of CDK4 and p53 in cell cycle G1 progression, share a common functionality in cell cycle G1 control. This gene is frequently mutated or deleted in a wide variety of tumors, and is known to be an important tumor suppressor gene. [provided by RefSeq, Sep 2012]
UniProt Comments for CDKN2A	**Function:** Acts as a negative regulator of the proliferation of normal cells by interacting strongly with CDK4 and CDK6. This inhibits their ability to interact with cyclins D and to phosphorylate the retinoblastoma protein.2 PublicationsManual assertion based on experiment in:Ref.11
Research Articles on CDKN2A	**1.** association was established between head and neck squamous cell carcinoma and rs11515 polymorphism
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.
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