Cyclin-Dependent Kinase Inhibitor 2 (KRP2) Arabidopsis Thaliana Recombinant Protein

PRODUCT OVERVIEW

Product Name	Cyclin-dependent kinase inhibitor 2 (KRP2), Recombinant Protein
Full Product Name	Recombinant Arabidopsis thaliana Cyclin-dependent kinase inhibitor 2 (KRP2)
Product Gene Name	KRP2 recombinant protein
Product Synonym Gene Name	KRP2
Sequence	MAAVRRRERD VVEENGVTTT TVKRRKMEEE VDLVESRIIL SPCVQATNRG GIVARNSAGA SETSVVIVRR RDSPPVEEQC QIEEEDSSVS CCSTSEEKSK RRIEFVDLEE NNGDDRETET SWIYDDLNKS EESMNMDSSS VAVEDVESRR RLRKSLHETV KEAELEDFFQ VAEKDLRNKL LECSMKYNFD FEKDEPLGGG RYEWVKLNP
Host	E Coli or Yeast or Baculovirus or Mammalian Cell
Form/Format	Lyophilized or liquid (Format to be determined during the manufacturing process)
Purity/Purification	Greater or equal to 85% purity as determined by SDS-PAGE. (lot specific)
Preparation and Storage	Store at -20 degrees C. For long-term storage, store at -20 degrees C or -80 degrees C. Store working aliquots at 4 degrees C for up to one week. Repeated freezing and thawing is not recommended.
Molecular Weight	24,037 Da
Sequence Positions	1-209aa; Full Length
Tag Information	This protein contains an N-terminal tag and may also contain a C-terminal tag. Tag types are determined by various factors including tag-protein stability, please inquire for tag information.
Sterility	Sterile filter available upon request.
Endotoxin	Low endotoxin available upon request.
3D Structure	ModBase 3D Structure for Q9SCR2
Species	Arabidopsis thaliana (Mouse-ear cress)
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Related Product Information for KRP2 recombinant protein	MBS1344167 is a recombinant protein targeting KRP2. Also known as Recombinant Arabidopsis thaliana Cyclin-dependent kinase inhibitor 2 (KRP2). Host: E Coli or Yeast or Baculovirus or Mammalian Cell.
Other Notes	Small volumes of KRP2 recombinant protein 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.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for KRP2. It may not necessarily be applicable to this product.

NCBI GI #	15229815
NCBI GeneID	824226
NCBI Accession #	NP_190632.1
UniProt Primary Accession #	Q9SCR2
UniProt Related Accession #	Q9SCR2
GenBank Nucleotide #	NM_114923.4

NCBI Official Full Name	KIP-related protein 2
NCBI Official Symbol	KRP2
NCBI Official Synonym Symbols	ICK2; KIP-related protein 2; KIP-RELATED PROTEIN 2
UniProt Protein Name	Cyclin-dependent kinase inhibitor 2
UniProt Synonym Protein Names	Inhibitor/interactor of CDK protein 2; KIP-related protein 2
Protein Family	Cyclin-dependent kinase inhibitor
UniProt Gene Name	KRP2
UniProt Synonym Gene Names	ICK2
NCBI Protein Information	KIP-related protein 2
NCBI Summary for KRP2	Kip-related protein (KRP) gene, encodes CDK (cyclin-dependent kinase) inhibitor (CKI), negative regulator of cell division. A member of seven KRP genes found in Arabidopsis thaliana. Differential expression patterns for distinct KRPs were revealed by in situ hybridization. Gene was isolated from a yeast two hybrid screen as an interacting protein of CDC2A. Recombinant protein has a strong kinase inhibitor activity in vitro. Transcript is expressed in all tissues examined but is differentially distributed from ICK1. Controls the onset of the endoreduplication cycle through inhibition of CDKA;1. The KRP2 protein abundance is regulated by proteolysis through CDKB1;1 phosphorylation.
UniProt Comments for KRP2	Binds and inhibits CYCD2-1/CDKA-1 complex kinase activity. Regulates cell division which is crucial for plant growth, development and morphogenesis. May regulate early lateral root initiation by blocking the G1/S phase transition. Controls the mitosis-to-endocycle transition and the onset of the endoreduplication cycle during leaf development through inhibition of mitotic CDKA-1 kinase complexes. Specifically targets CDKA-1.
Research Articles on KRP2	**1.** This work demonstrates that impeding cell cycle progression by means of ICK1/KRP1 and ICK2/KRP2 overexpression severely restricts gall development.
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/recombinant-protein/cyclin-dependent-kinase-inhibitor-2-krp2/1344167