

Pyruvate, phosphate dikinase regulatory protein 2 (RP2), Recombinant Protein

Cat *RP00306*

Size 0.02 mg (*E-Coli*)/ 0.02 mg (*Yeast*)/ 0.1 mg (*E-Coli*)/ 0.1 mg
(*Yeast*)/ 0.02 mg (*Baculovirus*)/ 0.02 mg (*Mammalian-Cell*)/ 0.1

mg (*Baculovirus*)/ 1 mg (*E-Coli*)/ 1 mg (*Yeast*)/ 0.1 mg
(*Mammalian-Cell*)/ 1 mg (*Baculovirus*)/ 0.5 mg (*Mammalian-Cell*)
Species *Arabidopsis thaliana* (Mouse-ear cress)

Full Product Name

Recombinant *Arabidopsis thaliana* Pyruvate, phosphate dikinase regulatory protein 2 (RP2)

Product Gene Name

RP2 recombinant protein

Product Synonym Gene Name

RP2

Purity

Greater or equal to 85% purity as determined by SDS-PAGE. (lot specific)

Sequence

MNLHGVSGHH EPNSEPPIPT GSSSPKLKIS PKLNRWSRGR ALRSGVKLDR PIPRSDNSPR RQVTEAQPTD
EADKKTTAID VEVTAGKSIY LVSDGTGWT A EHSVNAALGQ FEDFSLNRGS SVNTHLFSWV EDEERLIEII
KQAAKEGAMC FYTLANPSMA KSAKQACDQL GVLSVDILGP IIEGIASHLG VSPSGLTRGA PGRVKTLDNA
YFKRIEAEF TIKQDDGTLP ENLSKADIVL VGVSRGTGKTP LSTYIAQKGY KVANVPFVMG VEPRTLQV
EPRKVFLGI QLVLQAIRR TRVKTLGVD T EAENNYSGID LVRKELDFAS RIYERNPGWA VIDVTNKAIE
ETAAILRLY HDGRDTSTTV PRISKRY

Sequence Positions

1-377, Full length protein

Format

Lyophilized or liquid (Format to be determined during the manufacturing process)

Host

E Coli or *Yeast* or *Baculovirus* or *Mammalian Cell*

Molecular Weight

41,386 Da

Storage

Store at -20°C. For long-term storage, store at -20°C or -80°C. Store working aliquots at 4°C for up to one week.
Repeated freezing and thawing is not recommended.

Protein Family

Protein

NCBI Accession

NP_186769.1

NCBI GI

15232061

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

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Size 0.02 mg (E-Coli)/ 0.02 mg (Yeast)/ 0.1 mg (E-Coli)/ 0.1 mg (Yeast)/ 0.02 mg (Baculovirus)/ 0.02 mg (Mammalian-Cell)/ 0.1

mg (Baculovirus)/ 1 mg (E-Coli)/ 1 mg (Yeast)/ 0.1 mg (Mammalian-Cell)/ 1 mg (Baculovirus)/ 0.5 mg (Mammalian-Cell)

NCBI GenBank Nucleotide

NM_110986.4

NCBI GeneID

821293

NCBI Official Full Name

PPDK regulatory protein 2

NCBI Official Symbol

RP2

NCBI Official Synonym Symbols

AtRP2; PPDK regulatory protein 2; T4P13.11; T4P13_11

NCBI Protein Information

PPDK regulatory protein 2

NCBI Summary

Encodes a PPDK regulatory protein that has protein kinase activity but lacks protein phosphatase activity towards PPDK (pyruvate orthophosphate dikinase).

UniProt Gene Name

RP2

UniProt Synonym Gene Names

AtRP2; PPDK RP2; PPDK regulatory protein 2

UniProt Protein Name

Pyruvate, phosphate dikinase regulatory protein 2

UniProt Synonym Protein Names

Pyruvate, Pi dikinase regulatory protein 2; AtRP2; PPDK RP2; PPDK regulatory protein 2

UniProt Primary Accession

Q9MAC9

UniProt Related Accession

Q9MAC9

UniProt Comments

Bifunctional serine/threonine kinase and phosphorylase involved in the dark/light-mediated regulation of PPDK by catalyzing its phosphorylation/dephosphorylation. Has a much lower phosphotransferase activity than PDRP1 (PubMed:21883547). Can use ADP as a high specificity substrate and GDP as a lower affinity substrate, but has no activity with UDP (PubMed:21414960).

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