

Pyridoxal biosynthesis protein PDX2 (PDX2), Recombinant Protein

Cat RP01827

Size 0.02 mg (E-Coli)/ 0.1 mg (E-Coli)/ 0.02 mg (Yeast)/ 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 Pyridoxal biosynthesis protein PDX2 (PDX2)

Product Gene Name

PDX2 recombinant protein

Product Synonym Gene Name

PDX2

Purity

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

Sequence

MTVGVLALQG SFNEHIAALR RLGVQGVEIR KADQLLVSS LIIPGGESTT MAKLAEYHNL FPALREFVKM
GKPVWGTGAG LIFLADRAVG QKEGGQELVG GLDCTVHRNF FGSQIQSFEA DILVPQLTSQ EGGPETYRGV
FIRAPAVLDV GPDVEVLADY PVPSNKKVLYS SSTVQIQEED ALPETKVIVA VKQGNLLATA FHELTADTR
WHSYFIKMTK EIEQGASSSS SKTIVSVGET SAGPEPAKPD LPIFQ

Sequence Positions

1-255, 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

27,438 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

Pyridoxal 5'-phosphate synthase

NCBI Accession

NP_568922.1

NCBI GI

18424366

NCBI GenBank Nucleotide

NM_125447.2

NCBI GeneID

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

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836175 mg (Baculovirus)/ 1 mg (E-Coli)/ 1 mg (Yeast)/ 0.1 mg

(Mammalian-Cell)/ 1 mg (Baculovirus)/ 0.5 mg (Mammalian-

Cell)
pyridoxine biosynthesis 2

NCBI Official Symbol

PDX2

NCBI Official Synonym Symbols

ATPDX2; EMB2407; EMBRYO DEFECTIVE 2407; MUF9.1; MUF9_1; pyridoxine biosynthesis 2; PYRIDOXINE BIOSYNTHESIS 2

NCBI Protein Information

pyridoxine biosynthesis 2

NCBI Summary

Encodes a protein predicted to function in tandem with PDX1 to form glutamine amidotransferase complex with involved in vitamin B6 biosynthesis. PDX2 is predicted to function as glutaminase within the complex.

UniProt Gene Name

PDX2

UniProt Synonym Gene Names

EMB2407; AtPDX2

UniProt Protein Name

Probable pyridoxal 5'-phosphate synthase subunit PDX2

UniProt Synonym Protein Names

Protein EMBRYO DEFECTIVE 2407; Pyridoxal 5'-phosphate synthase glutaminase subunit (EC:3.5.1.2

UniProt Primary Accession

Q8LAD0

UniProt Secondary Accession

Q56ZP9; Q9FKJ3

UniProt Related Accession

Q8LAD0

UniProt Comments

Catalyzes the hydrolysis of glutamine to glutamate and ammonia as part of the biosynthesis of pyridoxal 5'-phosphate. The resulting ammonia molecule is channeled to the active site of PDX1. Involved in the indirect resistance to singlet oxygen-generating photosensitizers.

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