

Probable cinnamyl alcohol dehydrogenase 3 (CAD3), Recombinant Protein

Cat *RP11304*

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 *Oryza sativa* subsp. *japonica* (*Rice*)

Full Product Name

Recombinant *Oryza sativa* subsp. *japonica* Probable cinnamyl alcohol dehydrogenase 3 (CAD3)

Product Gene Name

CAD3 recombinant protein

Product Synonym Gene Name

CAD3

Purity

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

Sequence

MAPTAASAAA GEEQQAVGLA ARDSSGHLSP FAISRRSTGD DDVAIKILFC GICHSDLHCI KNEWKHSIYP
LVPGHEIAGV VTEVGKNVTR FKAGDRVGVG CMVNSCRSCE SCNNGFENHC PEGVFTYNSV DKDGTVTYGG
YSSMVVVHER FVVMFPEAMP LDVGAPLLCA GITVYTPMKY HGLNAPGKHV GVLGLGGLGH VAVKFARAFG
LKVTVISSSP GKKREALERL GADAFVVSSS AEEMEAARST MDGVINTVSA NTPMAPYLAL LKPNGKMILV
GLPENPLEVP PFSLVHGNRT LAGSNIGGMA DTQEMIELAA KHGVTADIEV IGADDVNTAM ERLAKADVRY
RFVIDVGNTL HAAAAE

Sequence Positions

1-366, 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

38,523 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

Probable mannitol dehydrogenase

NCBI Accession

XP_015613064.1

NCBI GI

1002299324

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY

Probable cinnamyl alcohol dehydrogenase 3 (CAD3), Recombinant Protein

Cat *RP11304*

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

XM_015757811

NCBI GeneID

4348690

NCBI Official Full Name

probable cinnamyl alcohol dehydrogenase 3

NCBI Official Symbol

LOC4348690

NCBI Official Synonym Symbols

CAD3; OsCAD3; OsJ_31603

NCBI Protein Information

probable cinnamyl alcohol dehydrogenase 3

UniProt Gene Name

CAD3

UniProt Synonym Gene Names

OsCAD3

UniProt Protein Name

Probable cinnamyl alcohol dehydrogenase 3

UniProt Primary Accession

Q337Y2

UniProt Secondary Accession

Q0IXJ2; A0A0P0XUG5

UniProt Related Accession

Q337Y2

UniProt Comments

Involved in lignin biosynthesis. Catalyzes the final step specific for the production of lignin monomers. Catalyzes the NADPH-dependent reduction of coniferaldehyde, 5-hydroxyconiferaldehyde, sinapaldehyde, 4-coumaraldehyde and caffeyl aldehyde to their respective alcohols.

FOR RESEARCH OR FURTHER MANUFACTURING USE ONLY