

Recombinant Mouse DOPA Decarboxylase/DDC Protein (His Tag)

Catalog No. PKSM040483

Note: Centrifuge before opening to ensure complete recovery of vial contents.

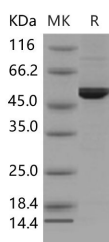
Description

Synonyms	Aadc
Species	Mouse
Expression Host	Baculovirus-Insect Cells
Sequence	Met 1-Glu 480
Accession	O88533
Calculated Molecular Weight	55.2 kDa
Observed molecular weight	50 kDa
Tag	C-His
Bioactivity	Not validated for activity

Properties

Purity	> 90 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile 50mM Tris, 100mM NaCl, pH 8.0, 20% glycerol, 3mM DTT Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 90 % as determined by reducing SDS-PAGE.

Background

Dopa Decarboxylase (DDC), also known as AADC and Aromatic-L-amino acid decarboxylase, is a 54 kDa member of

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the group II decarboxylase family of proteins. It is a vitamin B6-dependent homodimeric enzyme that catalyzes the decarboxylation of both L-3,4-dihydroxyphenylalanine (L-DOPA) and L-5-hydroxytryptophan to dopamine and serotonin, respectively, which are major mammalian neurotransmitters and hormones belonging to catecholamines and indoleamines. Since L-DOPA is regularly used to treat the symptoms of Parkinson's disease, the catalytic pathway is of particular research interest. Defects of DDC are associated with severe developmental delay, oculogyric crises (OGC), as well as autosomal recessive disorder AADC deficiency, an early onset inborn error in neurotransmitter metabolism which can lead to catecholamine and serotonin deficiency.