

32-2280: Dopa Decarboxylase Recombinant Protein

Alternative Name : DDC,AADC,Aromatic-L-amino-acid decarboxylase,DOPA decarboxylase.

Description

Source : Escherichia Coli. Dopa decarboxylase human recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 503 amino acids (1-480 a.a.) and having a molecular mass of 56.4 kDa. The Dopa decarboxylase is fused to 23 amino acid His Tag at N-terminus and purified by conventional chromatography. Dopa decarboxylase is a homodimeric, pyridoxal phosphate dependent enzyme. Dopa decarboxylase is involved in 2 metabolic pathways, synthesizing 2 significant neurotransmitters: dopamine and serotonin which both take part in numerous clinical disorders, including Parkinson's disease. Dopa decarboxylase is located in different areas of the brain and is mostly found in basal ganglia. Dopa decarboxylase catalyzes the decarboxylation of L-3,4-dihydroxyphenylalanine (DOPA) to dopamine, L-5-hydroxytryptophan to serotonin and L-tryptophan to tryptamine. Defects in Dopa decarboxylase leads to aromatic L-amino-acid decarboxylase deficiency (AADC). AADC deficiency is an inborn error in neurotransmitter metabolism that causes combined serotonin and catecholamine deficiency.

Product Info

Amount :	20 µg
Purification :	Greater than 95.0% as determined by SDS-PAGE.
Content :	The Dopa decarboxylase protein solution contains 20mM Tris-HCl, pH-8, 2mM DTT and 10% glycerol.
Storage condition :	Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.
Amino Acid :	MGSSHHHHHH SGLVPRGSH TRSMNASEFR RRGKEMVDYV ANYMEGIEGR QVYPDVEPGY LRPLIPAAAP QEPDTFEDII NDVEKIIMPG VTHWHSPYFF AYFPTASSYP AMLADMLCGA IGCIGFSWAA SPACTELETV MMDWLKMLE LPKAFLEKA GEGGGVIQGS ASEATLVALL AARTKVIHRL QAASPELTQA AIMEKLVAYS SDQAHSSVER AGLIGGVKLGK AIPSDGNFAM RASALQEAL RDKAAGLIPF FMVATLGTTT CCSFDNLLEV GPICKEDIW LHVDAAYAGS AFICPEFRHL LNGVEFADSF NFNPHKLLV NFDCSAMWVK KRTDLTGAFR LDPTYLKHSQ QDGLITDYR HWQIPLGRRF RSLKMWFVFR MYGVKGLQAY IRKHVQLSHE FESLVRQDPR FEICVEVILG LVCFRKGSN KVNEALLQRI NSAKKIHLVP CHLRDKFVLR FAICSRVTS AHVQRAWHEHI KELAADVLR ERE.

