Recombinant Human DDC, T7-tagged

Cat. No. DDC-848H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human DDC was produced in E.coli with a T7 tag at N-terminus. MW = 53894 Da (1-480 aa).
Species	Human
Source	E.coli
ProteinLength	1-480 a.a.
Description	Dopa Decarboxylase (DDC), also known as AADC and Aromatic-L-amino acid decarboxylase, is a 54 kDa member of 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.
Form	10 mM Tris. pH 8.0. 0.1% Triton X-100. 0.002% NaN3. 10mM DTT.
Purity	95%.

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Clonality	N/A.
Applications	MS. SDS.

GENE INFORMATION

Gene Name	DDC dopa decarboxylase (aromatic L-amino acid decarboxylase) [Homo sapiens]
Synonyms	DDC; dopa decarboxylase (aromatic L-amino acid decarboxylase); AADC; Aromatic-L-amino-acid decarboxylase; DOPA decarboxylase; EC 4.1.1.28; L-Dopa decarboxylase; aromatic L-amino acid decarboxylase
Gene ID	1644
mRNA Refseq	NM_000790
Protein Refseq	NP_000781
MIM	107930
UniProt ID	P20711
Chromosome Location	7p11
Pathway	Betalain biosynthesis; Biosynthesis of alkaloids derived from shikimate pathway; Histidine metabolism; Isoquinoline alkaloid biosynthesis; Metabolic pathways; Metabolic pathways; Phenylalanine metabolism; Tryptophan metabolism; Synaptic Transmission
Function	aromatic-L-amino-acid decarboxylase activity; lyase activity; protein binding; pyridoxal

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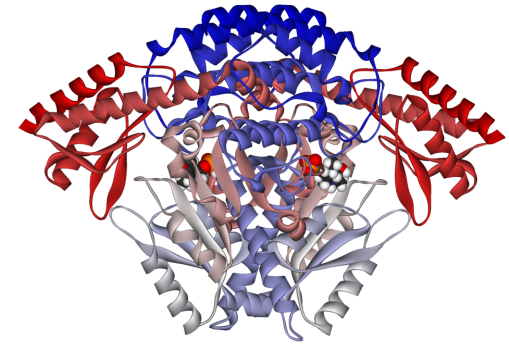
	phosphate binding
	

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