

Recombinant human Dopa Decarboxylase/DDC protein

Catalog Number: ATGP0267

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-480aa

UniProt No.

P20711

NCBI Accession No.

NP_001076440.2

Alternative Names

DDC, AADC, Aromatic L-amino acid decarboxylase, L-Dopa decarboxylase, Aromatic L Amino Acid Decarboxylase

PRODUCT SPECIFICATION

Molecular Weight

56.4 kDa (503aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 2mM DTT, 10% glycerol

Purity

> 95% by SDS-PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Tag

His-Tag

Application

SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

Dopa decarboxylase, also known as DDC, is a homodimeric, pyridoxal phosphate dependent enzyme. Dopa decarboxylase is a protein implicated in 2 metabolic pathways, synthesizing 2 important neurotransmitters: dopamine and serotonin which both play key roles in many clinical disorders, including Parkinson's disease. Dopa decarboxylase is found in different areas of the brain and is particularly abundant in basal ganglia.

Recombinant human Dopa Decarboxylase/DDC protein

Catalog Number: ATGP0267

Recombinant human Dopa decarboxylase protein, fused to His-tag at N-terminus, was expressed in *E. coli* and purified by using conventional chromatography.

Amino acid Sequence

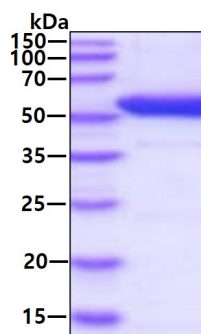
<MGSSHHHHH SSGLVPRGSH TRS>MNASEFR RRGKEMVDYV ANYMEGIEGR QVYPDVEPGY LRPLIPAAAP
QEPDTFEDII NDVEKIIMPG VTHWHSPYFF AYFPTASSYP AMLADMLCGA IGCIGFSWAA SPACTELETV MMDWLGKMLE
LPKAFLNEKA GEGGGVIQGS ASEATLVALL AARTKVIHRL QAASPELTQA AIMEKLVAYS SDQAHSSVER AGLIGGVKLG
AIPSDGNFAM RASALQEAL RDKAAGLIPF FMVATLGTTT CCSFDNLLEV GPICNKEDIW LHVDAAYAGS AFICPEFRHL
LNGVEFADSF NFNPHKWLLV NFDCSAMWVK KRTDLTGAFR LDPTYLKHSQ QDSGLITDYR HWQIPLGRRF RSLKMWFVFR
MYGVKGLQAY IRKHVQLSHE FESLVRQDPR FEICVEVILG LVCFRKLSGN KVNEALLQRI NSAKKIHLVP CHLRDKFVLR
FAICSRVTS AHVQRAWHEHI KELAADVLRA ERE

General References

Avgeris M., et al. (2008). *Clin Biochem.* 41(14-15):1140-9.
Pons R., et al. (2004). *Neruology.* 62(7):1058-65.

DATA

SDS-PAGE



3 μ g by SDS-PAGE under reducing condition and visualized by coomassie blue stain.