

Product datasheet for **SC330048**

DOPA Decarboxylase (DDC) (NM_001242886) Human Untagged Clone

Product data:

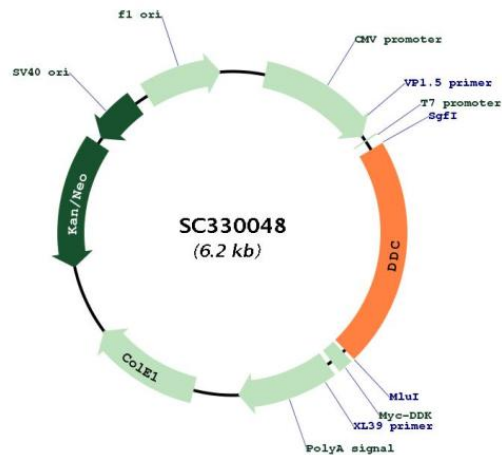
Product Type: Expression Plasmids
Product Name: DOPA Decarboxylase (DDC) (NM_001242886) Human Untagged Clone
Tag: Tag Free
Symbol: DDC
Synonyms: AADC
Vector: pCMV6-Entry (PS100001)
Fully Sequenced ORF: >SC330048 representing NM_001242886.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

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ATGAACGCAAGTGAATCCGAAGGAGAGGGAAGGAGATGGTGGATTACGTGGCCAACACATGGAAGGC
ATTGAGGGACGCCAGGTCTACCCGTGACGTGGAGCCCGGTACCTGCGGCCGCTGATCCCTGCCGCTGCC
CCTCAGGAGCCAGACACGTTTGGAGACATCATCAACGACGTTGAGAAGATAATCATGCCTGGGGCGGCA
AGCCCAGCATGCACAGAGCTGGAGACTGTGATGATGGACTGGCTCGGGAAGATGCTGGAACACCAAAG
GCATTTTTGAATGAGAAAGCTGGAGAAGGGGGAGGAGTATCCAGGAAGTGCCAGTGAAGCCACCCTG
GTGGCCCTGCTGGCCGCTCGGACCAAAGTATCCATCGGCTGCAGGCAGCGTCCCAGAGCTCACACAG
GCCGCTATCATGGAGAAGCTGGTGGCTTACTCATCCGATCAGGCACACTCCTCAGTGGAAAGAGCTGGG
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CAGGAAGCCCTGGAGAGAGACAAAGCGGCTGGCCTGATTCCTTTCTTTATGGTTGCCACCCTGGGGACC
ACAACATGCTGCTCCTTTGACAACTCTTTAGAAGTCGGTCCTATCTGCAACAAGGAAGACATATGGCTG
CACGTTGATGCAGCCTACGCAGGCAGTGCAATTCATCTGCCCTGAGTTCGGCACCTTCTGAATGGAGTG
GAGTTTGAGATTCACTCAACTTAATCCCCACAAATGGCTATTGGTGAATTTTACTGTTCTGCCATG
TGGGTGAAAAAGAGAACAGACTTAACGGGAGCCTTTAGACTGGACCCACTTACCTGAAGCACAGCCAT
CAGGATTCAGGGCTTATCACTGACTACCGGCATTGGCAGATACCACTGGGCAGAAGATTTGCTCTTTG
AAAATGTGGTTTGTATTTAGGATGTATGGAGTCAAAGGACTGCAGGCTTATATCCGAAGCATGTCCAG
CTGTCCCATGAGTTTGTGACTGCTGGTGCAGGATCCCCGCTTTGAAATCTGTGTGGAAGTCACTCTG
GGGCTTGTCTGCTTTGCGCTAAAGGTTCCAACAAAGTGAATGAAGCTCTTCTGCAAGAATAAACAGT
GCCAAAAAATCCACTTGGTTCCATGTCACCTCAGGGACAAGTTTGTCTGCGCTTTGCCATCTGTTCT
CGCACGGTGAATCTGCCATGTGCAGCGGCCTGGGAACACATCAAAGAGCTGGCGGCCGACGTGCTG
CGAGCAGAGAGGGAGTAG
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Restriction Sites: SgfI-MluI



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Plasmid Map:


ACCN: NM_001242886

Insert Size: 1329 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_001242886.1](#)

RefSeq Size: 1861 bp

RefSeq ORF: 1329 bp

Locus ID: 1644

UniProt ID:	<u>P20711</u>
Cytogenetics:	7p12.2-p12.1
Protein Families:	Druggable Genome
Protein Pathways:	Histidine metabolism, Metabolic pathways, Phenylalanine metabolism, Tryptophan metabolism, Tyrosine metabolism
MW:	49.7 kDa
Gene Summary:	<p>The encoded protein catalyzes the decarboxylation of L-3,4-dihydroxyphenylalanine (DOPA) to dopamine, L-5-hydroxytryptophan to serotonin and L-tryptophan to tryptamine. Defects in this gene are the cause of aromatic L-amino-acid decarboxylase deficiency (AADCD). AADCD deficiency is an inborn error in neurotransmitter metabolism that leads to combined serotonin and catecholamine deficiency. Multiple alternatively spliced transcript variants encoding different isoforms have been identified for this gene. [provided by RefSeq, Jun 2011]</p> <p>Transcript Variant: This variant (3) lacks an in-frame coding exon, compared to variant 2. The resulting isoform (2) lacks an internal segment, compared to isoform 1.</p>