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Product datasheet for SC316001

DOPA Decarboxylase (DDC) (NM_001082971) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DOPA Decarboxylase (DDC) (NM_001082971) Human Untagged Clone
Tag:	Tag Free
Symbol:	DDC
Synonyms:	AADC
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

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>OriGene sequence for NM_001082971 edited
GAGGACAGAGAGCAAGTCACTCCCGGCTGCCTTTTTCACCTCTGACAGAGCCCAGACACC
ATGAACGCAAGTGAATTCCGAAGGAGAGGGAAGGAGATGGTGGATTACGTGGCCAACTAC
ATGGAAGGCATTGAGGGACGCCAGGTCTACCCTGACGTGGAGCCCGGGTACCTGCGGCCG
CTGATCCCTGCCGCTGCCCCTCAGGAGCCAGACACGTTTGAGGACATCATCAACGACGTT
GAGAAGATAATCATGCCTGGGGTGACGCACTGGCACAGCCCCTACTTCTTCGCCTACTTC
CCCACTGCCAGCTCGTACCCGGCCATGCTTGCGGACATGCTGTGCGGGGCCATTGGCTGC
ATCGGCTTCTCCTGGGCGGCAAGCCCAGCATGCACAGAGCTGGAGACTGTGATGATGGAC
TGGCTCGGGAAGATGCTGGAACTACCAAAGGCATTTTTGAATGAGAAAGCTGGAGAAGGG
GGAGGAGTGATCCAGGGAAGTGCCAGTGAAGCCACCCTGGTGGCCCTGCTGGCCGCTCGG
ACCAAAGTGATCCATCGGCTGCAGGCAGCGTCCCCAGAGCTCACACAGGCCGCTATCATG
GAGAAGCTGGTGGCTTACTCATCCGATCAGGCACACTCCTCAGTGGAAAGAGCTGGGTTA
ATTGGTGGAGTGAAATTAAAAGCCATCCCCTCAGATGGCAACTTCGCCATGCGTGCGTCT
GCCCTGCAGGAAGCCCTGGAGAGAGACAAAGCGGCTGGCCTGATTCCTTTCTTTATGGTT
GCCACCCTGGGGACCACAACATGCTGCTCCTTTGACAATCTCTTAGAAGTCGGTCCTATC
TGCAACAAGGAAGACATATGGCTGCACGTTGATGCAGCCTACGCAGGCAGTGCATTCATC
TGCCCTGAGTTCCGGCACCTTCTGAATGGAGTGGAGTTTGCAGATTCATTCAACTTTAAT
CCCCACAAATGGCTATTGGTGAATTTTGACTGTTCTGCCATGTGGGTGAAAAAGAGAACA
GACTTAACGGGAGCCTTTAGACTGGACCCCACTTACCTGAAGCACAGCCATCAGGATTCA
GGGCTTATCACTGACTACCGGCATTGGCAGATACCACTGGGCAGAAGATTTCGCTCTTTG
AAAATGTGGTTTGTATTTAGGATGTATGGAGTCAAAGGACTGCAGGCTTATATCCGCAAG
CATGTCCAGCTGTCCCATGAGTTTGAGTCACTGGTGCGCCAGGATCCCCGCTTTGAAATC
TGTGTGGAAGTCATTCTGGGGCTTGTCTGCTTTCGGCTAAAGGGTTCCAACAAAGTGAAT
GAAGCTCTTCTGCAAAGAATAAACAGTGCCAAAAAAATCCACTTGGTTCCATGTCACCTC
AGGGACAAGTTTGTCCTGCGCTTTGCCATCTGTTCTCGCACGGTGGAATCTGCCCATGTG
CAGCGGGCCTGGGAACACATCAAAGAGCTGGCGGCCGACGTGCTGCGAGCAGAGAGGGAG
TAGGAGTGAAGCCAGCTGCAGGAATCAAAAATTGAAGAGAGATATATCTGAAAACTGGAA
TAAGAAGCAAATAAATATCATCCTGCCTTCATGGAACTCAGCTGTCTGTGGCTTCCCATG
TCTTTCTCCAAAGTTATCCAGAGGGTTGTGATTTTGTCTGCTTAGTATCTCATCAACAAA
GAAATATTATTTGCTAATTAAAAAGTTAATCTTCATGGCCATAGCTTTTATTCATTAGCT
GTGATTTTTGTTGATTAAAACATTATAGATTTTCATGTTCTTGCAGTCATCAGAAGTGGT
AGGAAAGCCTCACTGATATATTTTCCAGGGCAATCAATGTTCACGCAACTTGAAATTATA
TCTGTGGTCTTCAAATTGTCTTTTGTCATGTGGCTAAATGCCTAATAAACAATTCAAGTG
AAATACTAAAAAAAAAAAAAAAAAAAAAA
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Restriction Sites: Please inquire

ACCN: NM_001082971

Insert Size: 2000 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).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_001082971.1, NP_001076440.1
RefSeq Size:	2090 bp
RefSeq ORF:	1443 bp
Locus ID:	1644
UniProt ID:	P20711
Cytogenetics:	7p12.2-p12.1
Protein Families:	Druggable Genome
Protein Pathways:	Histidine metabolism, Metabolic pathways, Phenylalanine metabolism, Tryptophan metabolism, Tyrosine metabolism
Gene Summary:	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] Transcript Variant: This variant (1) has an alternate 5' UTR exon and encodes the same isoform (1), compared to variant 2.