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Product datasheet for SC122575

Dopamine beta Hydroxylase (DBH) (NM_000787) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Dopamine beta Hydroxylase (DBH) (NM_000787) Human Untagged Clone
Tag:	Tag Free
Symbol:	Dopamine beta Hydroxylase
Synonyms:	DBM; ORTHYP1
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene sequence for NM_000787 edited
CGCCCTCAGTCGCTGGGCCAGCCTGCCCGGCCCCAGCATGCGGGAGGCAGCCTTCATGTA
CAGCACAGCAGTGGCCATCTTCCTGGTCATCCTGGTGGCCGCACTGCAGGGCTCGGCTCC
CCGTGAGAGCCCCCTCCCCTATCACATCCCCCTGGACCCGGAGGGGTCCCTGGAGCTCTC
ATGGAATGTCAGCTACACCCAGGAGGCCATCCATTTCCAGCTCCTGGTGCGGAGGCTCAA
GGCTGGCGTCCTGTTTGGGATGTCCGACCGTGGCGAGCTTGAGAACGCAGATCTCGTGGT
GCTCTGGACCGATGGGGACACTGCCTATTTTGCGGACGCCTGGAGTGACCAGAAGGGCA
GATCCACCTGGATCCCCAGCAGGACTACCAGCTGCTGCAGGTGCAGAGGACCCCAGAAGG
CCTGACCCTGCTTTTCAAGAGGCCCTTTGGCACCTGCGACCCCAAGGATTACCTCATTGA
GGACGGCACTGTCCACTTGGTCTACGGGATCCTGGAGGAGCCGTTCCGGTCACTGGAGGC
CATCAACGGCTCGGGCCTGCAGATGGGGCTGCAGAGGGTGCAGCTCCTGAAGCCCAATAT
CCCCGAACCGGAGTTGCCCTCAGACGCGTGCACCATGGAGGTCCAAGCTCCCAATATCCA
GATCCCCAGCCAGGAGACCACGTACTGGTGCTACATTAAGGAGCTTCCAAAGGGCTTCTC
TCGGCACCACATTATCAAGTACGAGCCCATCGTCACCAAGGGCAATGAGGCCCTTGTCCA
CCACATGGAAGTCTTCCAGTGCGCCCCCGAGATGGACAGCGTCCCCCACTTCAGCGGGCC
CTGCGACTCCAAGATGAAACCCGACCGCCTCAACTACTGCCGCCACGTGCTGGCCGCCTG
GGCCCTGGGTGCCAAGGCATTTTACTACCCAGAGGAAGCCGGCCTTGCCTTCGGGGGTCC
AGGGTCCTCCAGATATCTCCGCCTGGAAGTTCACTACCACAACCCACTGGTGATAGAAGG
ACGAAACGACTCCTCAGGCATCCGCTTGTACTACACAGCCAAGCTGCGGCGCTTCAACGC
GGGGATCATGGAGCTGGGACTGGTGTACACGCCAGTGATGGCCATTCCACCACGGGAGAC
CGCCTTCATCCTCACTGGCTACTGCACGGACAAGTGCACCCAGCTGGCACTGCCTCCCTC
CGGGATCCACATCTTCGCCTCTCAGCTCCACACACACCTGACTGGGAGAAAGGTGGTCAC
AGTGCTGGTCCGGGACGGCCGGGAGTGGGAGATCGTGAACCAGGACAATCACTACAGCCC
TCACTTCCAGGAGATCCGCATGTTGAAGAAGGTCGTGTCGGTCCATCCGGGAGATGTGCT
CATCACCTCCTGCACGTACAACACGGAAGACCGGGAGCTGGCCACAGTGGGGGGCTTCGG
GATCCTGGAGGAGATGTGTGTCAACTACGTGCACTACTACCCCCAGACGCAGCTGGAGCT
CTGCAAGAGCGCTGTGGACGCCGGCTTCCTGCAGAAGTACTTCCACCTCATCAACAGGTT
CAACAACGAGGATGTCTGCACCTGCCCTCAGGCGTCCGTGTCTCAGCAGTTCACCTCTGT
TCCCTGGAACTCCTTCAACCGCGACGTACTGAAGGCCCTGTACAGCTTCGCGCCCATCTC
CATGCACTGCAACAAGTCCTCAGCCGTCCGCTTCCAGGGTGAATGGAACCTGCAGCCCCT
GCCCAAGGTCATCTCCACACTGGAAGAGCCCACCCCACAGTGCCCCACCAGCCAGGGCCG
AAGCCCTGCTGGCCCCACCGTTGTCAGCATTGGTGGGGGCAAAGGCTGAGGGGGGACCTA
CTCCTCCCCCTCCTCCATGCTGTCCCTGTGGGCTCACACCGGCACTGTGCACTCTACTCT
GCGACGATCCCCATGGAACAGCCCTGCATGCCCAGGATGAAGGGGCCAGACCACGCCCCT
GCCTGAGACCACGGTCCAATCCAGCCTTCTTCCCCCAGGGTCCCCTGCATGGCTGAGAGG
GTGTGGGTGCCCTGTTGACCTACCCTGGACCGAGTGGACCACGACCTCGTCCATTTAAAC
CCGGCTGACTCAGTGCAGGGACAGCCTGCACAGTGGTCCAGGGTCCAGCCCTCCGCCAGC
CCTGTTCCGCCTCACTGGGTGTGGCCTGGCTTCTGGGACAGGCACCATGCTGGGCCGGGG
TGTGGAATCACCGGGAACGCCCCCGCCCCCGCCCCGCTGCTCCCGGTGTGCAGCGGGTGC
GGGTGCCGCTTAAACATTTCCCTGCTGAGTGGCTCGTGTTTCACAGTGGGCGGCTTCCCT
GCGACGGAGGCAGGACCAGGCATTTAGCTAGTTAGAGACTCGCCTGGGAAATTGCTCCAT
TCCTGAGTAAACAGATATTTTCGCCCACCTAAAGGGAAGCCCTGACAACAACTATCACCA
AAAGACGAGGCGGCAAAGATCCAGCGGGGCTTCTGGGCGCCGGTTCCACGTGGGGTGGAA
TTATTAGCACCAGCTTGCTTCTCTGCCGGTGGGGCCAGCGCTGAACAGACCGGGGTGGAG
TCAGGGCTGTGCTTTCCGCGTGGTTCTGCCACTTAGGGAGTGTGCCTTGGGCGGGCCATT
TCACATTCCTGACCCTCACTTTTCTCATCTGTAAAACCAGGCTGATGCCGTGCGGGCTAA
TGAGCCAATAAAGCTCACACTTGGGCTGGCACCCACTGGAGGTGGGAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

5' Read Nucleotide Sequence:

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>OriGene 5' read for NM_000787 unedited
AGTTAGGATTTGTATACGACTTACTATAGGCGGCCGCGAATTCGCACGAGGCGCCCTCAG
TCGCTGGGCCAGCCTGCCCGGCCCCAGCATGCGGGAGGCAGCCTTCATGTACAGCACAGC
AGTGGCCATCTTCCTGGTCATCCTGGTGGCCGCACTGCAGGGCTCGGCTCCCCGTGAGAG
CCCCCTCCCCTATCACATCCCCCTGGACCCGGAGGGGTCCCTGGAGCTCTCATGGAATGT
CAGCTACACCCAGGAGGCCATCCATTTCCAGCTCCTGGTGCGGAGGCTCAAGGCTGGCGT
CCTGTTTGGGATGTCCGACCGTGGCGAGCTTGAGAACGCAGATCTCGTGGTGCTCTGGAC
CGATGGGGACACTGCCTATTTTGCGGACGCCTGGAGTGACCAGAAGGGGCAGATCCACCT
GGATCCCCAGCAGGACTACCAGCTGCTGCAGGTGCAGAGGACCCCAGAAGGCCTGACCCT
GCTTTTCAAGAGGCCCTTTGGCACCTGCGACCCCAAGGATTACCTCATTGAGGACGGCAC
TGTCCACTTGGTCTACGGGATCCTGGAGGAGCCGTTCCGGTCACTGGAGGCCATCAACGG
CTCGGGCCTGCAGATGGGGCTGCAGAGGGTGCAGCTCCTGAAACCCAATATCCCCGAACC
GGAGTTGCCCTCAGACGCGTGCACCATGGAGGTCCAAGCTTCCAATATCCAGATCCCCAG
CCAGGAACCACGTTCTGGTGCTACATTAAGGAGCCTTCAAAGGGCTTCTCTCGGCACCCC
ATATCCAGTTCAAACCCTTCGTCCCAAGGGCAAGGAAGACCCTGTCCACCCCTTGGAAAT
CTTCCTTGCGCCCCGAAAAGGGAACGGGTCCCCATTTAGGCGGGCCCTGGAACTCCAAAA
GAAA
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Restriction Sites: Please inquire

ACCN: NM_000787

Insert Size: 2807 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_000787.2, NP_000778.2

RefSeq Size: 2760 bp

RefSeq ORF: 1812 bp

Locus ID: 1621

UniProt ID: P09172

Cytogenetics: 9q34.2

Protein Families: Druggable Genome, Secreted Protein, Transmembrane

Protein Pathways: Metabolic pathways, Tyrosine metabolism

Gene Summary: The protein encoded by this gene is an oxidoreductase belonging to the copper type II, ascorbate-dependent monooxygenase family. The encoded protein, expressed in neuroscretory vesicles and chromaffin granules of the adrenal medulla, catalyzes the conversion of dopamine to norepinephrine, which functions as both a hormone and as the main neurotransmitter of the sympathetic nervous system. The enzyme encoded by this gene exists exists in both soluble and membrane-bound forms, depending on the absence or presence, respectively, of a signal peptide. Mutations in this gene cause dopamine beta-hydroxylate deficiency in human patients, characterized by deficits in autonomic and cardiovascular function, including hypotension and ptosis. Polymorphisms in this gene may play a role in a variety of psychiatric disorders. [provided by RefSeq, Aug 2017]