

Product datasheet for SC319204

SDHB (NM_003000) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: SDHB (NM_003000) Human Untagged Clone

Tag: Tag Free
Symbol: SDHB

Synonyms: CWS2; IP; MC2DN4; PGL4; SDH; SDH1; SDH2; SDHIP

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-AC (PS100020)E. coli Selection:Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_003000.2

ACCCGGGAAACCGGAAGCCGCCTCCCACTTGGTTGCTCGTACGCGGCTAGTGGGTCCTCA GTGGATGTAGGCTGGGCGCCGCGATGTTCGACGGGACACCGGCGGAGAGCGACCTCGGGG TTAAGGGGTGGGCTGACGTCAGGAGCCAAGATGGCGGCGGTGGTCGCACTCTCCTTGAG GACAGCTGCAGCCACAGCTCCCCGTATCAAGAAATTTGCCATCTATCGATGGGACCCAGA CAAGGCTGGAGACAACCTCATATGCAGACTTATGAAGTTGACCTTAATAAATGTGGCCC CATGGTATTGGATGCTTTAATCAAGATTAAGAATGAAGTTGACTCTACTTTGACCTTCCG AAGATCATGCAGAGAAGGCATCTGTGGCTCTTGTGCAATGAACATCAATGGAGGCAACAC TCTAGCTTGCACCGAAGGATTGACACCAACCTCAATAAGGTCTCAAAAAATCTACCCTCT TCCACACATGTATGTGATAAAGGATCTTGTTCCCGATTTGAGCAACTTCTATGCACAGTA CAAATCCATTGAGCCTTATTTGAAGAAGAAGGATGAATCTCAGGAAGGCAAGCAGCAGTA TCTGCAGTCCATAGAAGAGCGTGAGAAACTGGACGGGCTCTACGAGTGCATTCTCTGTGC CTGCTGTAGCACCAGCTGCCCCAGCTACTGGTGGAACGGAGACAAATATCTGGGGCCTGC AGTTCTTATGCAGGCCTATCGCTGGATGATTGACTCCAGAGATGACTTCACAGAGGAGCG CCTGGCCAAGCTGCAGGACCCATTCTCTCTATACCGCTGCCACACCATCATGAACTGCAC AAGGACCTGTCCTAAGGGTCTGAATCCAGGGAAAGCTATTGCAGAGATCAAGAAAATGAT GGCAACCTATAAGGAGAAGAAGCTTCAGTTTAACTGTTTCCATGCTAAACATGATTTAT AACCAGCTCAGAGCTGAACATAATTTATATCTAATTTGAGTTCCTTTAAAGATCTTGGTT

Restriction Sites: Please inquire **ACCN:** NM 003000



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SDHB (NM_003000) Human Untagged Clone - SC319204

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: <u>NM 003000.2</u>, <u>NP 002991.2</u>

 RefSeq Size:
 1161 bp

 RefSeq ORF:
 843 bp

 Locus ID:
 6390

 UniProt ID:
 P21912

 Cytogenetics:
 1p36.13

Domains: fer2

Protein Families: Druggable Genome

Protein Pathways: Alzheimer's disease, Citrate cycle (TCA cycle), Huntington's disease, Metabolic pathways,

Oxidative phosphorylation, Parkinson's disease

Gene Summary: Complex II of the respiratory chain, which is specifically involved in the oxidation of succinate,

carries electrons from FADH to CoQ. The complex is composed of four nuclear-encoded subunits and is localized in the mitochondrial inner membrane. The iron-sulfur subunit is highly conserved and contains three cysteine-rich clusters which may comprise the iron-sulfur centers of the enzyme. Sporadic and familial mutations in this gene result in paragangliomas

and pheochromocytoma, and support a link between mitochondrial dysfunction and

tumorigenesis. [provided by RefSeq, Jul 2008]