

## Product datasheet for RC231709

### SDHD (NM\_001276504) Human Tagged ORF Clone

#### Product data:

|                           |                                                                                |
|---------------------------|--------------------------------------------------------------------------------|
| Product Type:             | Expression Plasmids                                                            |
| Product Name:             | SDHD (NM_001276504) Human Tagged ORF Clone                                     |
| Tag:                      | Myc-DDK                                                                        |
| Symbol:                   | SDHD                                                                           |
| Synonyms:                 | CBT1; CII-4; CWS3; cybS; MC2DN3; PGL; PGL1; QPs3; SDH4                         |
| Mammalian Cell Selection: | Neomycin                                                                       |
| Vector:                   | pCMV6-Entry (PS100001)                                                         |
| E. coli Selection:        | Kanamycin (25 ug/mL)                                                           |
| ORF Nucleotide Sequence:  | >RC231709 representing NM_001276504<br>Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGGCGGTTCTCTGGAGGCTGAGTGCCGTTTGCAGTGCCTAGGAGGCCGAGCTGGCTCCAAGGCTGCAT  
 CTCTCCACTGGACTAGCGAGAGGGTTGTCAGTGTTCCTGCTGGGTCTGCTCCGGCTGCTTATTTGAA  
 TCCTTGCTCTGCGATGGACTATTCCTGGCTGCAGCCCTCACTCTTCATGGTCACTGGGGCTTGGACAA  
 GTTGTTACTGACTATGTTTCATGGGGATGCCTTGCAAAAGCTGCCAAGGCAGGGCTTTTGGCACTTTCAG  
 CTTTAACCTTTGCTGGGCTTTGCTATTTCAACTATCACGATGTGGGCATCTGCAAAGCTGTTGCCATGCT  
 GTGGAAGCTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

|                   |                                                                       |
|-------------------|-----------------------------------------------------------------------|
| Protein Sequence: | >RC231709 representing NM_001276504<br>Red=Cloning site Green=Tags(s) |
|-------------------|-----------------------------------------------------------------------|

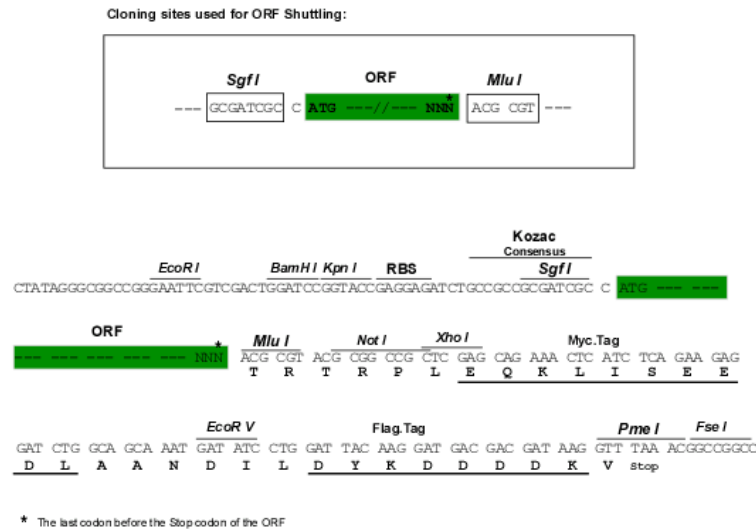
MAVLWRLSAVCGALGGRAGSKAASLHWTSEVVSVLLGLLPAAAYLNPCSAAMDYSLAAALTLHGHWGLGQ  
 VVTDYVHGDALQKAAGALLALSALTFAGLCYFNYHDVGICKAVAMLWKL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

|                    |           |
|--------------------|-----------|
| Restriction Sites: | Sgfl-MluI |
|--------------------|-----------|


[View online »](#)

Cloning Scheme:



ACCN: NM\_001276504

ORF Size: 360 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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.

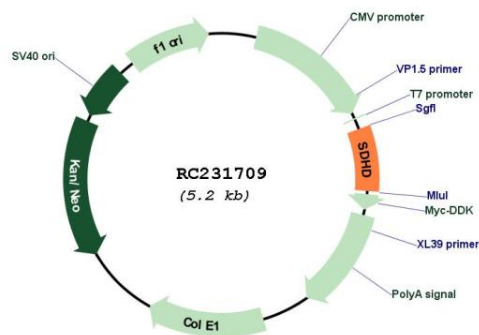
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM\\_001276504.2](#)

RefSeq Size: 1278 bp

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RefSeq ORF:       | 363 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Locus ID:         | 6392                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| UniProt ID:       | <u><a href="#">O14521</a></u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Cytogenetics:     | 11q23.1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Protein Pathways: | Alzheimer's disease, Citrate cycle (TCA cycle), Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| MW:               | 13.1 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Gene Summary:     | This gene encodes a member of complex II of the respiratory chain, which is responsible for the oxidation of succinate. The encoded protein is one of two integral membrane proteins anchoring the complex to the matrix side of the mitochondrial inner membrane. Mutations in this gene are associated with the formation of tumors, including hereditary paraganglioma. Transmission of disease occurs almost exclusively through the paternal allele, suggesting that this locus may be maternally imprinted. There are pseudogenes for this gene on chromosomes 1, 2, 3, 7, and 18. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Feb 2013] |

## Product images:



Circular map for RC231709