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Product datasheet for RG231812

SDHD (NM_001276506) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SDHD (NM_001276506) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SDHD
Synonyms:	CBT1; CII-4; CWS3; cybS; MC2DN3; PGL; PGL1; QPs3; SDH4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG231812 representing NM_001276506
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGGTTCTCTGGAGGCTGAGTGCCGTTTGCGGTGCCCTAGGAGGCCGAGCTCTGTTGCTTCGAACTC
CAGTGGTCAGACCTGCTCATATCTCAGCATTTCTTCAGGACCGACCTATCCCAGAATGGTGTGGAGTGCA
GCACATACACTTGTCACCGAGCCACCATTCTGGCTCCAAGGCTGCATCTCTCCACTGGACTAGCGAGAGG
GTTGTCAGTGTTTTGCTCCTGGGTCTGCTTCCGGCTGCTTATTTGAATCCTTGCTCTGCGATGGACTATT
CCCTGGCTGCAGCCCTCACTCTTCATGGTCACTGGCTGGAGTGCAATGGTGCGATCTTGGCTCGGCACGA
TCTCGGCTCAGCACGATCTCAGCTTACTGCAACCTCCGCCTTTCGGGTTCAAGCGATTCTCCTGCCTCAG
CCTCCCAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG231812 representing NM_001276506
Red=Cloning site Green=Tags(s)

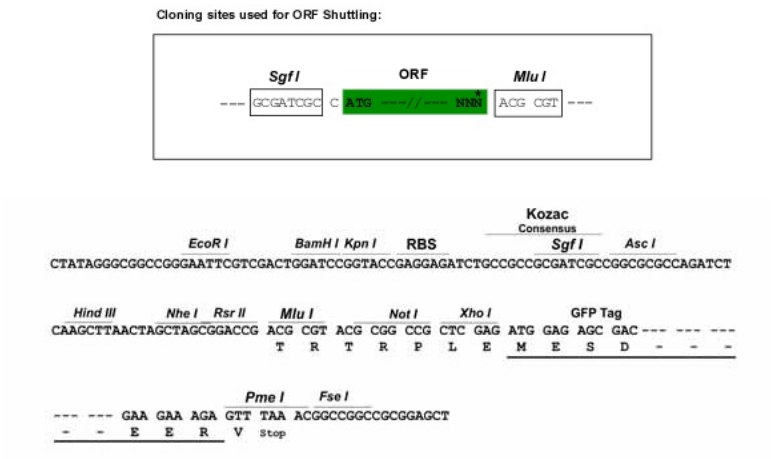
MAVLWRLSAVCGALGGRALLLRTPVVRPAHISAFLQDRPIPEWCGVQHIHLSPSHHSGSKAASLHWTSER
VVSVLLLGLLPAAYLNPCSAMDYSLAAALTLHGHWLECNGAILARHDLGSARSQLTATSAFRVQAILLPQ
PPK

TRTRPLE - GFP Tag - V

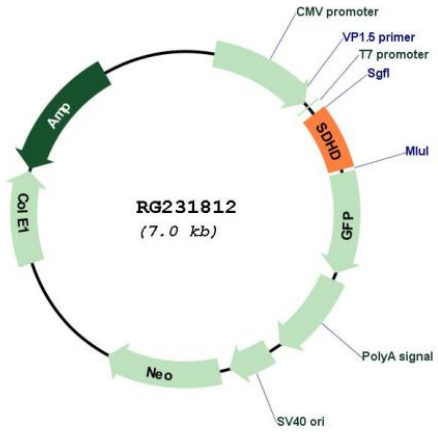
Restriction Sites: SgfI-MluI

View online »

Cloning Scheme:



Plasmid Map:



ACCN:	NM_001276506
ORF Size:	429 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.
RefSeq:	NM_001276506.2
RefSeq Size:	1525 bp
RefSeq ORF:	432 bp
Locus ID:	6392
UniProt ID:	O14521
Cytogenetics:	11q23.1
Protein Pathways:	Alzheimer's disease, Citrate cycle (TCA cycle), Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease
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]