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Product datasheet for RC200868

SLC25A19 (NM_021734) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SLC25A19 (NM_021734) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SLC25A19
Synonyms:	DNC; MCPHA; MUP1; THMD3; THMD4; TPC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC200868 representing NM_021734
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGTTGGCTATGACCCCAAACCAGATGGCAGGAATAACACCAAGTTCCAGGTGGCAGTGGCTGGGTCTG
TGTCTGGACTTGTTACTCGGGCGCTGATCAGTCCCTTCGACGTCATCAAGATCCGTTTCCAGCTTCAGCA
TGAGCGCCTGTCTCGCAGTGACCCCAGCGCAAAGTACCATGGCATCCTCCAGGCCTCTAGGCAGATTCTG
CAGGAGGAGGGTCCGACAGCTTTCTGGAAAGGACACGTCCCAGCTCAGATTCTCTCCATAGGCTATGGAG
CTGTCCAATTCTTGTCATTTGAAATGCTGACGGAGCTGGTCCACAGAGGCAGCGTGTATGACGCCCGGGA
ATTCTCAGTGCACTTTGTATGTGGTGGCCTGGCTGCCTGTATGGCCACCCTCACTGTGCACCCCGTGGAT
GTTCTGCGCACCCGCTTTGCAGCTCAGGGTGAGCCCAAGGTCTATAATACGCTGCGCCACGCCGTGGGGA
CCATGTATAGGAGCGAAGGCCCCCAGGTTTTCTACAAAGGCTTGGCTCCCACCTTGATCGCCATCTTCCC
CTACGCCGGGCTGCAGTTCTCTTGCTACAGCTCCTTGAAGCACCTGTACAAGTGGGCCATACCAGCCGAA
GGAAAGAAAAATGAGAACCTCCAAAACCTGCTTTGTGGCAGTGGAGCTGGTGTCATCAGCAAGACCCTGA
CATATCCGCTGGACCTCTTCAAGAAGCGGCTACAGGTTGGAGGGTTTGAGCATGCCAGAGCTGCCTTTGG
CCAGGTACGGAGATACAAGGGCCTCATGGACTGTGCCAAGCAGGTGCTGCAAAAGGAAGGCGCCCTGGGC
TTCTTCAAGGGCCTGTCCCCCAGCTTGCTGAAGGCTGCCCTCTCCACAGGCTTCATGTTCTTCTCGTATG
AATTCTTCTGTAATGTCTTCCACTGCATGAACAGGACAGCCAGCCAGCGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC200868 representing NM_021734
Red=Cloning site Green=Tags(s)

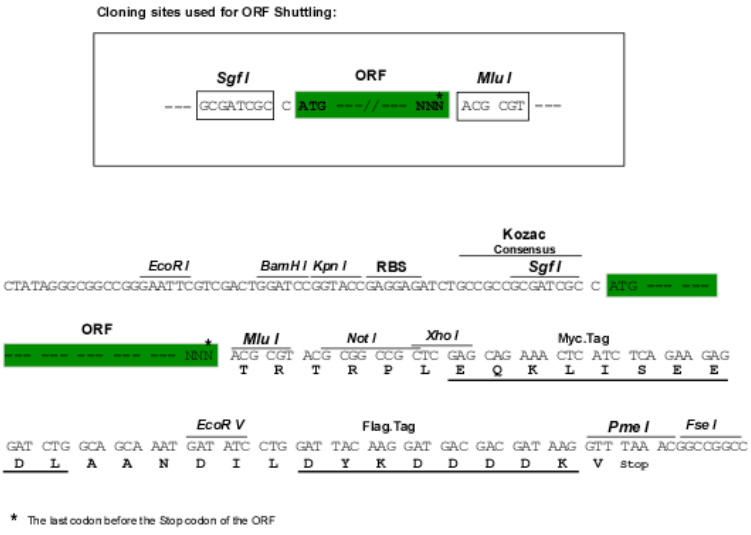
MVGYDPKPDGRNNTKFQVAVAGSVSGLVTRALISPFDVIKIRFQLQHERLSRSDPSAKYHGILQASRQIL
QEEGPTAFWKGHVPAQILSIGYGAVQFLSFEMLTELVHRGSVYDAREFSVHFVCGGLAACMATLTVHPVD
VLRTRFAAQGEPKVYNTLRHAVGTMYRSEGPQVFYKGLAPTLIAIFPYAGLQFSCYSSLKHLYKWAIPAE
GKKNENLQNLLCGSGAGVISKTLTYPLDLFKKRLQVGGFEHARAAFGQVRRYKGLMDCAKQVLQKEGALG
FFKGLSPSLLKAALSTGFMFFSYEFFCNVFHCMNRTASQR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja1529_c12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_021734

ORF Size: 960 bp

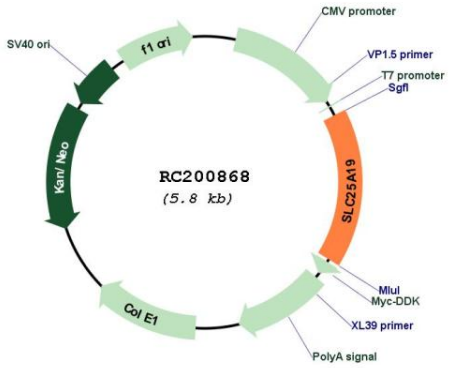
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

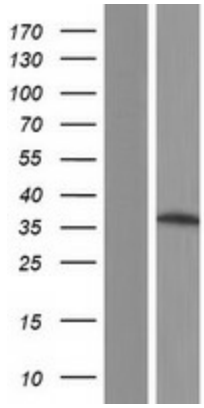
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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_021734.4
RefSeq Size:	1651 bp
RefSeq ORF:	963 bp
Locus ID:	60386
UniProt ID:	Q9HC21
Cytogenetics:	17q25.1
Domains:	mito_carr
Protein Families:	Druggable Genome
MW:	35.3 kDa
Gene Summary:	This gene encodes a mitochondrial protein that is a member of the solute carrier family. Although this protein was initially thought to be the mitochondrial deoxynucleotide carrier involved in the uptake of deoxynucleotides into the matrix of the mitochondria, further studies have demonstrated that this protein instead functions as the mitochondrial thiamine pyrophosphate carrier, which transports thiamine pyrophosphates into mitochondria. Mutations in this gene cause microcephaly, Amish type, a metabolic disease that results in severe congenital microcephaly, severe 2-ketoglutaric aciduria, and death within the first year. Multiple alternatively spliced variants, encoding the same protein, have been identified for this gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC200868



Western blot validation of overexpression lysate (Cat# [LY411928]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200868 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).