

## Product datasheet for RC212809

### SLC25A21 (NM\_030631) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SLC25A21 (NM_030631) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SLC25A21
Synonyms:	MTDPS18; ODC; ODC1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC212809 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGTCCGCCAAGCCTGAAGTCAGCTTAGTGCGCGAGGCTTCTCGGCAGATCGTGGCCGGTGGTTCTGCAG  
GTCTTGTAGAAATTTGCCTGATGCACCCCTAGATGTGGTGAAAACCAGGTTTCAGATTCAGAGATGTGC  
AACCGATCCAAACAGTTATAAAAGCTTGGTAGACAGCTTTCGAATGATTTTCAAATGGAAGGGTTATTT  
GGTTTTTACAAGGAATTCTGCCACCTATCTTGGCTGAAACCCAAAAAGAGCAGTGAAGTTTTTCACT  
TTGAGCAGTACAAGAAATTGCTGGGATATGTGTCCTGTCACCAGCATTGACATTCGCCATTGCTGGATT  
GGGATCTGGACTAACAGAAGCCATTGTAGTTAACCCTTTTGAGGTAGTAAAAGTTGGCTTGAAGCAAAT  
CGGAACACATTTGCAGAGCAACCATCCACTGTGGGTTATGCAAGACAAATCATTAAAGGAAGGCTGGG  
GACTCCAGGGCCTCAACAAAGGATTAAGTCAACTTTGGGACGACATGGAGTTTTCAACATGGTTTTATT  
TGGCTTCTACTACAATGTCAAAAACATGATTCCTGTCAATAAGGATCCAATCTTGGAGTTTTGGAGAAAA  
TTTGGGATTGGTCTTCTCGGGGACAATAGCCTCAGTCATTAACATCCCTTTTGATGTTGCCAAAAAGTA  
GGATTCAGGGCCTCAACCAGTTCCTGGAGAGATCAAGTACAGAACCTGTTTTAAACAATGGCAACAGT  
CTATCAGGAAGAAGGGATTTTAGCTTTGTACAAAGGCTGCTTCCAAGATTATGAGACTTGACCAGGT  
GGTGCAGTGATGCTGCTGTTTATGAATACACCTATTCATGGCTTCAAGAGAAGTGG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC212809 protein sequence  
 Red=Cloning site Green=Tags(s)

MSAKPEVSLVREASRQIVAGGSAGLVEICLMHPLDVVKTRFQIQRCATDPNSYKSLVDSFRMIFQMEGLF  
 GFYKGI LPPILAETPKRAVKFFTFEQYKLLGYVSLSPALTFIAIAGLGSGLTEAIVVNPFEVVKVGLQAN  
 RNTFAEQPSTVGYARQIIKKEGWGLQGLNKGLTATLGRHGVMVMYVGFYVNVKMNIPVKNKDPILFWRK  
 FGIGLLSGTIIASVINIPFDVAKSRIQGPVPGEIKYRTCFKTMATVYQEEGILALYKGLLPKIMRLGPG  
 GAVMLLVYEYTSWLQENW

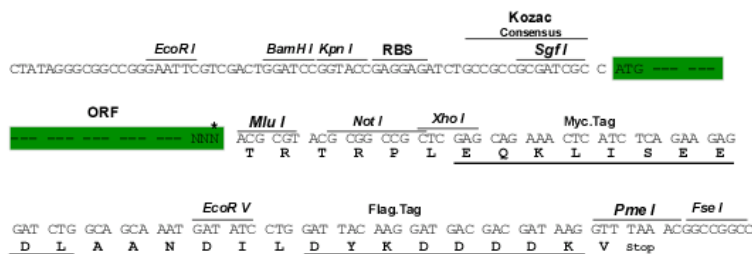
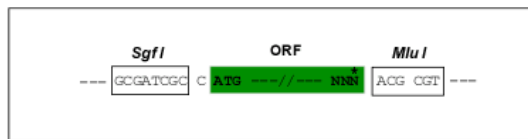
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6460\\_g01.zip](https://cdn.origene.com/chromatograms/mk6460_g01.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_030631

**ORF Size:** 897 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\\_030631.4](#)

**RefSeq Size:** 3947 bp

**RefSeq ORF:** 900 bp

**Locus ID:** 89874

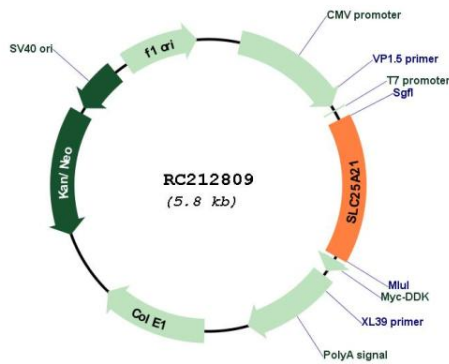
**UniProt ID:** [Q9BQT8](#)

**Cytogenetics:** 14q13.3

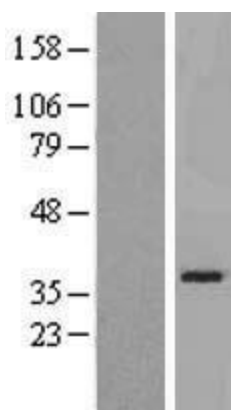
**MW:** 33.3 kDa

**Gene Summary:** SLC25A21 is a homolog of the *S. cerevisiae* ODC proteins, mitochondrial carriers that transport C5-C7 oxodicarboxylates across inner mitochondrial membranes. One of the species transported by ODC is 2-oxoadipate, a common intermediate in the catabolism of lysine, tryptophan, and hydroxylysine in mammals. Within mitochondria, 2-oxoadipate is converted into acetyl-CoA.[supplied by OMIM, Apr 2004]

### Product images:



Circular map for RC212809



Western blot validation of overexpression lysate (Cat# [LY410756]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212809 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).