

## Product datasheet for MR205182

### Slc25a33 (NM\_027460) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Slc25a33 (NM_027460) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Slc25a33
Synonyms:	5730438N18Rik; Pnc1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR205182 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGACGGCACTCAGCAGAAAGAGAACACGCTGCTTCATCTCTTCGCCGGCGGGTGCGGGGCACAG  
TTGGTGTATTTTACATGTCCACTAGAAGTCATTAAGACGCGACTGCAGTCTTCGAGACTAGCTCTTCG  
GACGGTGTATTACCCTCAGGTTTCATCTGGGGACCATTAGTGGAGCTGGAATGGTGAGACCAACGTCTGTG  
ACGCCTGGACTCCTACAGTTCTGAAATCAATCCTGAAAAGGAGGGACCAAAGTCACTCTTTAGAGGCC  
TGGGTCCAAATTTGGTTGGAGTGCACCATCAAGGGCTGTGTACTTTGCATGTTATTCCAAGCCAAAGA  
GCAATTCATGGCGTCTTCGTGCCTAATAGCAATACTGTGCACATTCTCTCAGCTGGCTCTGCAGCTTTT  
GTCACAAATACCTTAATGAATCCTATTTGGATGGTAAAACGAGGATGCAGCTAGAACGCAAGGTGAGGG  
GCTGCAAGCAGATGAACACACTCCAGTGTGCTCGGCGTGTCTACCAGACAGAAGGCGTCCGCGGCTCTA  
TAGAGGGCTGACCGCCTCCTACGCTGGGATCTCGGAGACAATCATCTGCTTTGCTATTTATGAGAGCTTA  
AAGAAGTGTGAAAGACGCTCCGATCGTCTCCTCCACAGATGGAGCTGAGAAAAGTTCCCTCGCTTCT  
TTGGACTCATGGCAGCTGCTGCTGTTTCTAAGGGATGTGCCTCCTGCATCGTTACCCACACGAGGTCAT  
CAGGACCGGCTCCGCGAGGAAGGCAGCAAGTACAGGTCCTTCGTGCAGACCGCGCCTGGTGTCCGG  
GAGGAAGGCTACCTCGCCTTCTACCGAGGACTGTTTGTCTCAGCTCATCCGGCAGATCCCCAACACTGCCA  
TTGTCTGTCCACCTACGAGTTCATCGTGTACCTGCTGGGAGAGCGTGCT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR205182 protein sequence  
 Red=Cloning site Green=Tags(s)

MATGTQQKENTLLHLFAGGCGGTVGAIFTCPLEVIKTRLQSSRLALRTVYYPQVHLGTISGAGMVRPTSV  
 TPGLLQVLKKSILEKEGPKSLFRGLGNLVGVAPSRVYFACYSKAKEQFNGVFPNSNTVHILSAGSAAF  
 VTNTLMNPIWMVKTRMQLERKVRGCKQMNTLQCARRVYQTEGVRGFYRGLTASYAGISETIICFAIYESL  
 KKCLKDAPIVSSTDGAEKSSSGFFGLMAAAVSKGCASCIAYPHEVIRTRLREEGSKYRSFVQTARLVFR  
 EEGYLAFYRGLFAQLIRQIPNTAIVLSTYEFIVYLLGERA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



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

**ACCN:** NM\_027460

**ORF Size:** 963 bp

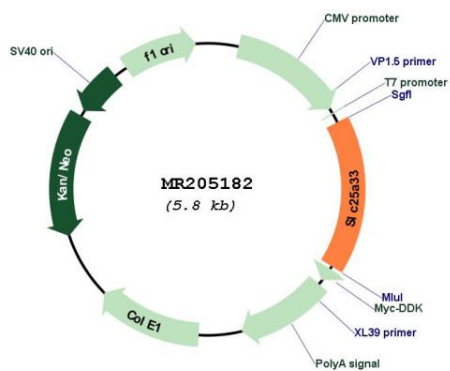
**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone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

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_027460.2</a> , <a href="#">NP_081736.2</a>
<b>RefSeq Size:</b>	1877 bp
<b>RefSeq ORF:</b>	963 bp
<b>Locus ID:</b>	70556
<b>UniProt ID:</b>	<a href="#">Q3TZX3</a>
<b>Cytogenetics:</b>	4 E2
<b>MW:</b>	35 kDa
<b>Gene Summary:</b>	Mitochondrial transporter that imports/exports pyrimidine nucleotides into and from mitochondria. Transports preferentially uracil, thymine, and cytosine (deoxy)nucleoside di- and triphosphates by an antiport mechanism. Also transports guanine but not adenine (deoxy)nucleotides. Is inhibited strongly by pyridoxal 5'-phosphate, 4,7-diphenyl-1,10-phenanthroline, tannic acid, and mercurials (mercury dichloride, mersalyl acid, p-hydroxymercuribenzoate). Participates in mitochondrial genome maintenance, regulation of mitochondrial membrane potential and mitochondrial respiration (By similarity). Upon INS or IGF1 stimulation regulates cell growth and proliferation by controlling mitochondrial DNA replication and transcription, the ratio of mitochondria-to nuclear-encoded components of the electron transport chain resulting in control of mitochondrial ROS production (PubMed:17596519). Participates in dendritic cell endocytosis and may associate with mitochondrial oxidative phosphorylation (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR205182