

## Product datasheet for **RC214295**

### SLC36A1 (NM\_078483) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	SLC36A1 (NM_078483) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SLC36A1
Synonyms:	Dct1; LYAAT1; PAT1; TRAMD3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC214295 representing NM\_078483  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGTCCACGCAGAGACTTCGGAATGAAGACTACCACGACTACAGCTCCACGGACGTGAGCCCTGAGGAGA  
 GCCCGTCGGAAGGCCTCAACAACCTCTCCTCCCGGGCTCTACCAGCGCTTTGGTCAAAGCAATAGCAC  
 AACATGGTTCCAGACCTTGATCCACCTGTTAAAAGGCAACATTGGCACAGGACTCCTGGGACTCCCTCTG  
 GCGGTGAAAAATGCAGGCATCGTGATGGGTCCCATCAGCCTGCTGATCATAGGCATCGTGGCCGTGCACT  
 GCATGGGTATCCTGGTGAATGTGCTCACCCTCTGCCGAGGCTGAATAAATCCTTTGTGGATTATGG  
 TGATACTGTGATGTAGGACTAGAATCCAGCCCCTGCTCTGGCTCCGGAACCACGCACACTGGGAAGA  
 CGTGTGTGGACTTCTCCTGATTGTCACCCAGCTGGGATTCTGCTGTGTCTATTTGTGTTCTGGCTG  
 ACAACTTTAAACAGGTGATAGAAGCGGCAATGGGACCACCAATAACTGCCACAACAATGAGACGGTGAT  
 TCTGACGCTACCATGGACTCGGACTCTACATGCTCTCCTTCTGCCCTTCTGGTGTGCTGGTTTTTC  
 ATCAGGAACCTCCGAGCCCTGTCCATCTTCTCCCTGTTGGCCAACATCACCATGTGGTCAGCTTGGTCA  
 TGATCTACCAGTTCATTGTTTCAGAGGATCCCAGACCCAGCCACCTCCCTTGGTGGCCCTTGGGAAGAC  
 CTACCCTCTCTTTGGCACAGCGATTTTTTCATTTGAAGGCATTGGAATGGTTCTGCCCTGGAAAAAC  
 AAAATGAAGGATCCTCGGAAGTCCCACCTCATCTGTACCTGGGCATGGTCATCGTCACCATCCTCTACA  
 TCAGCCTGGGGTGTCTGGGGTACCTGCAATTTGGAGCTAATATCCAAGGCAGCATAACCCCTAACCTGCC  
 CAACTGCTGGTTGTACCAGTCAGTTAAGCTGCTGACTCCATCGGGATCTTTTTCACCTACGCACTCCAG  
 TTCTACGTCCTGGCTGAGATCATATCCCTTCTTTGTGTCCCGAGCGCCGAGCACTGTGAGTTAGTGG  
 TGGACCTGTTTGTGCGCACAGTGTGCTGCTGCCAGCATGCATCTTGGCCATCCTCATCCCCCGCTGGA  
 CCTGGTCATCTCCCTGGTGGGCTCCGTGAGCAGCAGCGCCCTGGCCCTCATCATCCCACCGCTCCTGGAG  
 GTCACCACCTTCTACTCAGAGGGCATGAGCCCCCTCACCATCTTTAAGGACGCCCTGATCAGCATCTGG  
 GCTTCGTGGGCTTTGTGGTGGGGACCTATGAGGCTCTCTATGAGCTGATCCAGCCAAGCAATGCTCCCAT  
 CTTTCATCAATCCACCTGTGCCTCATA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC214295 representing NM\_078483  
 Red=Cloning site Green=Tags(s)

MSTQRLRNEDYHDYSSTDVSPSESPSEGLNNLSSPGSYQRFQSNSTTWFQTLIHLKGNIGTGLLGLPL  
 AVKNAGIVMGPISLLIIGIVAVHCMGILVKCAHHFCRRLNKSFDYDGTVMYGLESSPCSWLRNHAHWGR  
 RVVDFFLIVTQLGFCCVYFVFLADNFKQVIEAANGTTNNCHNNETVILPTMDSRLYMLSFLPFLVLLVF  
 IRNLRALSIFSLLANITMLVSLVMIYQFIVQRI PDPSHLPLVAPWKTYPLFFGTAFSFEIGMVLPLEN  
 KMKDPRKFPLILYLMVIVTILYISLGCLGYLQFGANIQGSITLNLPCWLYQSVKLLYSIGIFFTYALQ  
 FYVPAEIIIPFFVSRAPHECELVVDLFRVTVLVCLTCILAILIPRLDLVISLVGSVSSALALIIPPLLE  
 VTFYSEGMSPLTIFKDALISILGFVGFVVGTYEALYELIQPSNAPIFINSTCAF I

**TR**TRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:**

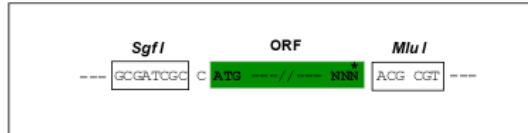
[https://cdn.origene.com/chromatograms/mk6511\\_h06.zip](https://cdn.origene.com/chromatograms/mk6511_h06.zip)

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**

Cloning sites used for ORF Shutting:

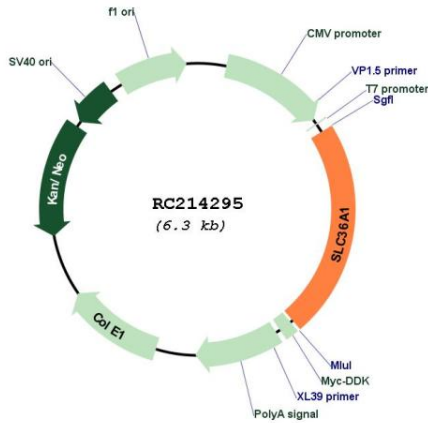


\* The last codon before the Stop codon of the ORF

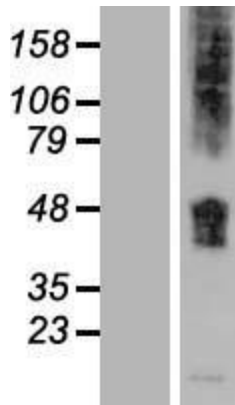
- ACCN:** NM\_078483
- ORF Size:** 1428 bp
- OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each 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\\_078483.4](#)
- RefSeq Size:** 5821 bp
- RefSeq ORF:** 1431 bp
- Locus ID:** 206358
- UniProt ID:** [Q7Z2H8](#)
- Cytogenetics:** 5q33.1

**Domains:** Aa\_trans  
**Protein Families:** Transmembrane  
**MW:** 52.9 kDa  
**Gene Summary:** This gene encodes a member of the eukaryote-specific amino acid/auxin permease (AAP) 1 transporter family. The encoded protein functions as a proton-dependent, small amino acid transporter. This gene is clustered with related family members on chromosome 5q33.1. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Apr 2015]

**Product images:**



Circular map for RC214295



Western blot validation of overexpression lysate (Cat# [LY409191]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC214295 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).