

Product datasheet for **RG214295**

SLC36A1 (NM_078483) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	SLC36A1
Synonyms:	Dct1; LYAAT1; PAT1; TRAMD3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



ORF Nucleotide Sequence: >RG214295 representing NM_078483
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGTCCACGCAGAGACTTCGGAATGAAGACTACCACGACTACAGCTCCACGGACGTGAGCCCTGAGGAGA
 GCGCGTCGGAAGGCCTCAACAACCTCTCTCCCGGGCTCCTACCAGCGCTTTGGTCAAAGCAATAGCAC
 AACATGGTTCCAGACCTTGATCCACCTGTTAAAAGGCAACATTGGCACAGGACTCCTGGGACTCCCTCTG
 GCGGTGAAAAATGCAGGCATCGTGATGGGTCCCATCAGCCTGCTGATCATAGGCATCGTGGCCGTGCACT
 GCATGGGTATCCTGGTGAATGTGCTCACCCTTCTGCCGAGGCTGAATAAATCCTTTGTGATTATGG
 TGATACTGTGATGTATGGACTAGAATCCAGCCCCTGCTCCTGGCTCCGGAACACGCACACTGGGGAAGA
 CGTGTTGTGGACTTCTTCTGATTGTACCCAGCTGGGATTCTGCTGTGTCTATTTTGTGTTTCTGGCTG
 ACAACTTTAAACAGGTGATAGAAGCGGCCAATGGGACCACCAATAACTGCCACAACAATGAGACGGTGAT
 TCTGACGCCTACCATGGACTCGCGACTCTACATGCTCTCTTCTGCCCTTCTGGTGCTGCTGGTTTTTC
 ATCAGGAACCTCCGAGCCTGTCCATCTTCTCCCTGTTGGCCAACATCACCATGCTGGTCAGCTTGGTCA
 TGATCTACCAAGTTCATTGTTACAGAGGATCCAGACCCAGCCACCTCCCCTTGGTGGCCCTTGAAGAC
 CTACCTCTCTTCTTGGCACAGCATTTTTTCATTGAAGGCATTGGAATGGTTCTGCCCTGGAAAAC
 AAAATGAAGGATCCTCGGAAGTTCACCTCATCTGTACCTGGGCATGGTCATCGTACCATCCTCTACA
 TCAGCCTGGGGTGTCTGGGGTACCTGCAATTTGGAGCTAATATCCAAGGCAGCATAACCCTCAACCTGCC
 CAACTGCTGGTTGTACAGTCAAGTAAAGCTGCTGTACTCCATCGGGATCTTTTTACCTACGCACTCCAG
 TTCTACGTCCCGGCTGAGATCATATCCCCTTCTTTGTGTCCCGAGCGCCGAGCACTGTGAGTTAGTGG
 TGGACCTGTTGTGCGCACAGTCTGGTCTGCCTGACATGCATCTTGGCCATCCTATCCCCGCTGGA
 CCTGGTCATCTCCCTGGTGGGCTCCGTGAGCAGCAGCGCCCTGGCCCTCATCATCCACCGCTCTGGAG
 GTCACCACCTTCTACTCAGAGGGCATGAGCCCCCTCACCATCTTTAAGGACGCCCTGATCAGCATCTGG
 GCTTCGTGGGCTTTGTGGTGGGACCTATGAGGCTCTCTATGAGCTGATCCAGCCAAGCAATGCTCCCAT
 CTTTCATCAATTCACCTGTGCCTTCATA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG214295 representing NM_078483
 Red=Cloning site Green=Tags(s)

MSTQRLRNEDYHDYSSTDVSPSESPSEGLNNLSSPGSYQRFQSNSTTWFTLIHLLKGNIGTGLLGLPL
 AVKNAGIVMGPIISLLIIGIVAVHMGILVKCAHHFCRRLNKSFVDYGDVVMYGLESSPCSWLRNHAHWGR
 RVVDFFLIVTQLGFCCVYFVFLADNFKQVIEAANGTTNNCHNNETVILTPTMDSRLYMLSFLPFLVLLVF
 IRNLRALSIFSLLANITMLVSLVMIYQFIVQRIIPDPSHLPLVAPWKTYPLFFGTAFISFEGIGMVLPLEN
 KMKDPRKFLILYLGMIIVTILYISLGCLGYLQFGANIQGSITLNLNPNWLYQSVKLLYSIGIFFTYALQ
 FYVPAEIIIPFFVSRAPHECELVDLFRVTVLVCLTCILAILIPRLDLVISLVGSVSSSALALIIPPLLE
 VTTFYSEGMSPLTIFKDALISILGFVGVVGTYEALYELIQPSNAPIFINSTCAFI

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_078483.4](#)

RefSeq Size: 5821 bp

RefSeq ORF: 1431 bp

Locus ID: 206358

UniProt ID: [Q7Z2H8](#)

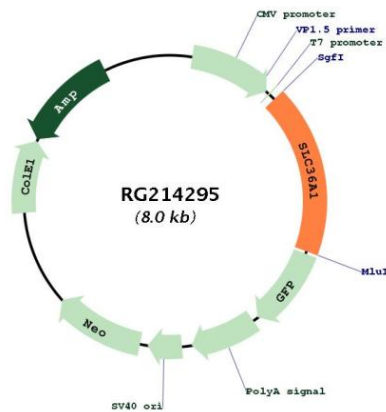
Cytogenetics: 5q33.1

Domains: Aa_trans

Protein Families: Transmembrane

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 RG214295