OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RG215739

SLC36A2 (NM_181776) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	SLC36A2
Synonyms:	PAT2; TRAMD1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG215739 representing NM_181776
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCTGTGACAAAAAGTACTGAGGGTCCCCAGGGAGCCGTTGCCATCAAATTGGACCTTATGTCGCCTC
CTGAAAGTGCCAAGAAGTTGGAGAACAAGGACTCTACATTCTTGGATGAAAGTCCTTCAGAGTCAGCAGG
CTTGAAGAAGACCAAGGGCATAACAGTGTTCCAGGCCTTGATTCACCTGGTGAAAGGCAACATGGGCACA
GGGATCCTGGGACTACCCCTCGCTGTGAAGAACGCGGGCATCCTGATGGGCCCACTCAGTCTGCTGGTGA
TGGGCTTCATTGCCTGCCACTGTATGCACATCCTGGTCAAGTGTGCCCAGCGCTTCTGTAAGAGGCTTAA
CAAGCCCTTTATGGACTATGGGGACACGGTGATGCATGGACTAGAAGCCAACCCCAACGCCTGGCTCCAG
AATCACGCTCACTGGGGAAGGCATATCGTGAGCTTCTTCCTTATTATCACCCAACTTGGCTTCTGCTGTG
TGTACATTGTGTTTTTGGCTGATAATTTAAAACAGGTAGTGGAAGCTGTTAATAGCACAACCAACAACTG
CTATTCCAATGAGACGGTGATTCTGACCCCCACCATGGACTCGCGACTCTACATGCTCTCCTTCCTGCCC
TTCCTGGTGCTGCTGGTCCTCATCCGGAACCTCAGGATCTTGACCATCTTCTCCATGCTGGCCAACATCA
GCATGCTGGTCAGCTTGGTCATCATCATACAGTACATTACCCAGGAAATCCCAGACCCCAGCCGGTTGCC
ACTGGTAGCAAGCTGGAAGACCTACCCTCTCTTCTTCGGAACAGCCATTTTTTCTTTTGAAAGCATTGGT
GTGGTTCTGCCTCTGGAAAACAAGATGAAGAATGCCCGCCACTTCCCAGCCATCCTGTCTTTGGGAATGT
CCATCGTCACTTCCCTATACATTGGCATGGCGGCTCTGGGCTACCTGCGGTTTGGAGATGACATCAAGGC
CAGCATAAGCCTTAACCTGCCTAACTGCTGGCTGTACCAGTCTGTCAAGCTTCTCTACATTGCCGGCATC
CTGTGCACCTATGCCCTGCAGTTCTACGTCCCTGCAGAAATCATCATCCCCTTTGCCATCTCCCGGGTGT
CAACACGCTGGGCACTGCCTCTGGATCTGTCCATTCGCCTCGTCATGGTCTGCCTGACATGCCTCCTGGC
CATCCTCATCCCCCGCCTGGACCTGGTCATCTCCCTGGTGGGCTCCGTGAGTGGCACCGCCCTGGCCCTC
ATCATCCCACCGCTCCTGGAGGTCACCACGTTCTACTCAGAGGGCATGAGCCCCCTCACCATCTTCAAGG
ACGCCCTGATCAGCATCCTGGGCTTCGTGGGCTTTGTGGTGGGGACCTACCAGGCCCTGGACGAGCTGCT
CAAGTCAGAAGACTCTCACCCCTTTTCCAACTCCACCACTTTTGTTCGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

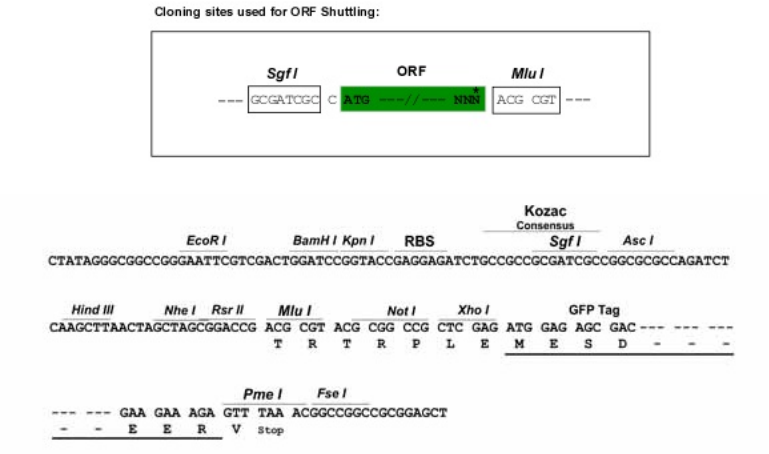
>RG215739 representing NM_181776
Red=Cloning site Green=Tags(s)

MSVTKSTEGPQGAVAIKLDLMSPPESAKKLENKDSTFLDESPSESAGLKKTKGITVFQALIHLVKGNMGT
GILGLPLAVKNAGILMGPLSLLVMGFIACHCMHILVKCAQRFCKRLNKPFMDYGDTVMHGLEANPNAWLQ
NHAHWGRHIVSFFLIITQLGFCCVYIVFLADNLKQVVEAVNSTTNNCYSNETVILTPTMDSRLYMLSFLP
FLVLLVLIRNLRILTIFSMLANISMLVSLVIIIQYITQEIPDPSRLPLVASWKTYPLFFGTAIFSFESIG
VVLPLENKMKNARHFPAILSLGMSIVTSLYIGMAALGYLRFGDDIKASISLNLPNCWLYQSVKLLYIAGI
LCTYALQFYVPAEIIIPFAISRVSTRWALPLDLSIRLVMVCLTCLLAILIPRLDLVISLVGSVSGTALAL
IIPPLLEVTTFYSEGMSPLTIFKDALISILGFVGFVVGTYQALDELLKSEDSHPFSNSTTFVR

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_181776

ORF Size: 1449 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_181776.3

RefSeq Size: 3407 bp

RefSeq ORF: 1452 bp

Locus ID: 153201

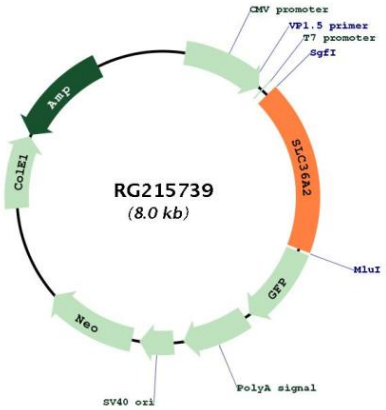
UniProt ID: Q495M3

Cytogenetics: 5q33.1

Protein Families: Transmembrane

Gene Summary: This gene encodes a pH-dependent proton-coupled amino acid transporter that belongs to the amino acid auxin permease 1 protein family. The encoded protein primarily transports small amino acids such as glycine, alanine and proline. Mutations in this gene are associated with iminoglycinuria and hyperglycinuria. [provided by RefSeq, Sep 2010]

Product images:



Circular map for RG215739