

Product datasheet for **RG210214**

SLC7A2 (NM_001008539) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SLC7A2 (NM_001008539) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SLC7A2
Synonyms:	ATRC2; CAT2; HCAT2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RG210214 representing NM_001008539
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCCGCATCGCC

ATGATTCTTGCAGAGCCGCGTGACCTTTGCCGATGTCTGATCCGGAGAAAAATCGTGACCCTGGACA
GTCTAGAAGACACCAAATTATGCCGCTGCTTATCCACCATGGACCTCATTGCCCTGGGCGTTGGAAGCAC
CCTTGGGCGCGGGTTTATGTCCTCGCTGGGGAGGTGGCCAAGGCAGACTCGGGCCCCAGCATCGTGTTG
TCCTTCTCATTGCTGCCTGGCTTCACTGATGGCTGGCCTCTGCTATGCCGAATTTGGGCGCGTGTTC
CCAAGACGGGCTGTCATATTTGTACACCTACGTGACTGTGAGAGCTGTGGCCTTCATCACTGGCTG
GAATCTCATTTTATCGTATGTGATAGGTACATCAAGTGTGCAAGAGCCTGGAGTGGCACCTTTGATGAA
CTTCTTAGCAAACAGATTGGTCAGTTTTGAGGACATACTCAGAATGAATTACTGGTCTTGCAGAAT
ATCCCATTTTTTGCTGTGTGCCTTATATTCTTAGCAGGCTTTTTGCTTTTTGGAGTAAAAGAGTC
TGCTTGGGTGAATAAAGTCTTACAGCTGTTAATATTCTCGTCTTCTGTTTGTGATGGTTGCTGGGTTT
GTGAAAGGAAATGTGGCAAACCTGGAAGATTAGTGAAGAGTTTCTCAAAAATATATCAGCAAGTGCCAGAG
AGCCACCTTCTGAAAACGGAACAAGTATCTATGGGGCTGGTGGCTTTATGCCCTTATGGCTTACGGGAAC
GTTGGCTGGTGTGCAACTTGTCTTTATGCCTTTGTGGGATTTGACTGCATTGCAACAACCTGGTGAAGAA
GTTCCGAAATCCCCAGAAAGCTATCCCATTGGAATTGTGACGCTTTGCTTGTGTTGCTTTATGGCCTATT
TTGGGGTCTCTGCAGCTTAACTTATGATGCCGTAACCTCCTCGATGAAAAAGCCCCCTTCTGT
AGCGTTTGAATATGTGGGATGGGGTCTGCCAAATATGTCGTGCGAGCTGGTTCTCTGCGCCTTGCA
ACAAGTCTTCTGGATCCATTTCCCAATGCCTCGTGAATCTATGCTATGGCGGAGGATGGGTTGCTTT
TCAAATGTCTAGCTCAAATCAATTCCAAAACGAAGACACCAATAATTGCTACTTTATCATCGGGTGCAGT
GGCAGCTTTGATGGCCTTTCTGTTTACCTGAAGGCGCTTGTGGACATGATGTCCATTGGCACACTCATG
GCCTACTCTCTGGTGGCAGCCTGTGTTCTCATCCTCAGGTACCAGCCTGGCTTATCTTACGACCAGCCCA
AATGTTCTCTGAGAAAGATGGTCTGGGATCGTCTCCAGGGTAACCTCGAAGAGTGAGTCCCAGGTCAC
CATGCTGCAGAGACAGGGCTTACGATGCGGACCCTTCTGCCCTCCCTTCTGCCAACACAGCAGTCA
GCTTCTCTCGTGAGCTTTCTGGTAGGATCCTAGCTTTCTCGTGTGGGCTGAGTGTCTTGACCACTT
ACGGAGTTCATGCCATCACCAGGCTGGAGGCTGGAGCCTCGCTCTCCTCGCGCTGTTTCTTGTCTCTT
CGTTGCCATCGTTCTCACCATCTGGAGGCAGCCCAGAATCAGCAAAAAGTAGCCTTCATGGTCCATTC
TTACCATTTTTGCCAGCGTTCAGCATCTTGGTGAACATTTACTTGATGGTCCAGTTAAGTGCAGACACTT
GGGTGAGATTCAGCATTTGGATGCAATTGGCTTCTGATTTACTTTCTTATGGCATTAGACACAGCCT
GGAGGGTCATCTGAGAGATGAAAACAATGAAGAAGATGCTTATCCAGACAACGTTTCATGCAGCAGAGAA
GAAAAATCTGCCATTCAGCAAATGACCATCACCAAGAAATCTCAGTTCACCTTTCATATTCCATGAAA
AGACAAGTGAATTC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG210214 representing NM_001008539
 Red=Cloning site Green=Tags(s)

MIPCRAALTFARCLIRRKIVTLDLEDTKLCRCLSTMDLIALGVGSTLGAGVYVLAGEVAKADSGPSIVV
 SFLIAALASVMAGLCYAEFGARVPKTSAYLYTYVTGELWAFITGWNLILSYVIGTSSVARAWSGTFDE
 LLSKQIGQFLRTYFRMNYTGLAEYDFFAVCLILLLAGLLSFGVKESAWVNKVFTAVNILVLLFVMVAGF
 VKGNVANWKISEEFLKNI SASAREPPSENGTSIYGAGGFMPYGF GTLAGAATCFYAFVGFDCIATTGEE
 VRNPQKAIPIGIVTSLLVCFMAYFGVSAALTLMPYLLDEKSPLPVAFEYVVGWGPAPYVVAAGSLCALS
 TSLLGSI FMPRIYAMAEDGLLFKCLAQINSKTKPIIATLSSGAVAALMAFLFDLKALVDMMSIGTLM
 AYSLVAACVLI LRYQPLSYDQPKCSPEKDGLGSSPRVTSKSESQV TMLQRQGF SMRTLFCPSLLPTQQS
 ASLVSFLVGLAFLV LGLSVL TTYGVHAI TRLEAWSLALLALFLVLFVAIVLTIWRQPQNQQKVAFMVPP
 LPFLPAFSILVNIYLMVQLSADTWVRF SIWMAIGFLIYFSYGI RHSLEGHLR DENNEEDAYPDNVHAAA
 EKSAIQANDHHPRLSSPFI FHEKTSEF

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001008539

ORF Size: 1974 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_001008539.4](#)

RefSeq Size: 7389 bp

RefSeq ORF: 1977 bp

Locus ID: 6542

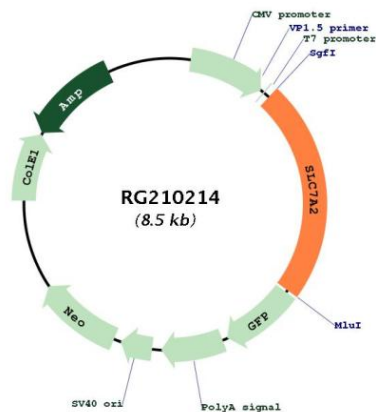
UniProt ID: [P52569](#)

Cytogenetics: 8p22

Protein Families: Druggable Genome, Transmembrane

Gene Summary: The protein encoded by this gene is a cationic amino acid transporter and a member of the APC (amino acid-polyamine-organocation) family of transporters. The encoded membrane protein is responsible for the cellular uptake of arginine, lysine and ornithine. Three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2011]

Product images:



Circular map for RG210214