

## Product datasheet for **RG205055**

### SLC7A9 (NM\_014270) Human Tagged ORF Clone

#### Product data:

|                           |                                           |
|---------------------------|-------------------------------------------|
| Product Type:             | Expression Plasmids                       |
| Product Name:             | SLC7A9 (NM_014270) Human Tagged ORF Clone |
| Tag:                      | TurboGFP                                  |
| Symbol:                   | SLC7A9                                    |
| Synonyms:                 | BAT1; CSNU3                               |
| Mammalian Cell Selection: | Neomycin                                  |
| Vector:                   | pCMV6-AC-GFP (PS100010)                   |
| E. coli Selection:        | Ampicillin (100 ug/mL)                    |



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**ORF Nucleotide  
Sequence:**

>RG205055 representing NM\_014270  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGGGGATACTGGCCTGAGAAAGCGGAGAGAGGATGAGAAGTCGATCCAGAGCCAAGAGCCTAAGACCA  
 CCAGTCTCCAAAAGGAGCTGGGCCTCATCAGTGGCATCTCCATCATCGTGGGCACCATCATTGGCTCTGG  
 GATCTTCGTTTCCCCAAGTCTGTGCTCAGCAACACGGAAGCTGTGGGGCCCTGCCTCATCATATGGGCG  
 GCTTGGGGGTCCTCGCGACGCTGGGTGCCCTGTGCTTTCGGGAGCTTGGCACAATGATACCAAGTCAG  
 GGGGAGAGTATCCCTACCTGATGGAGGCCTACGGGCCCATCCCCGCCTACCTCTTCTCTGGGCCAGCCT  
 GATCGTCATTAAGCCACGTCTTCGCCATCATCTGCCTCAGCTTCTCCGAGTATGTGTGTGCGCCCTTC  
 TATGTGGGCTGCAAGCCTCCTCAAATCGTTGTGAAATGCCTGGCCGCCGCCCATCTTGTTTCATCTCGA  
 CAGTGAACCTCACTGAGCGTGGGCTGGGAAGCTACGTCCAGAACATCTTACC CGGCCAAGCTGGTGAT  
 CGTGGCCATCATCATCAGCGGGCTGGTGCTCCTGGCCCAAGGAAACACAAAGAATTTTGATAATTCT  
 TTCGAGGGCGCCAGCTGTCTGTGGGAGCCATCAGCCTGGCGTTTACAATGGACTCTGGGCCTATGATG  
 GATGGAATCAACTCAATTACATCACAGAAGAACTAGAAACCCTTACAGAAACCTGCCTTTGGCCATTAT  
 CATCGGATCCCCCTGGTGACGGCGTGCTACATCCTCATGAACGTGTCTACTTCACCGTGATGACTGCC  
 ACCGAACCTCTGCAGTCCAGGCGGTGGCTGTGACATTTGGTGACCGTGTCTCTATCCTGCTTCTTGGA  
 TCGTTCCACTTTTGTGGCATTTCACCATCGGTGCTGCTAACGGGACCTGCTTACAGCGGGCAGACT  
 CATTTACGTGGCGGGCCGGGAGGTCACATGCTCAAAGTGCTTTCTTACATCAGCGTCAGGCGCCTCACT  
 CCAGCCCCCGCCATCATCTTTTATGGTATCATAGCAACGATTTATATCATCCCTGGTGACATAAACTCGT  
 TAGTCAATTATTCAGCTTTGCCGATGGCTGTTTATGGCCTGACGATTCTAGGACTCATCGTGATGAG  
 ATTTACAAGGAAAGAGCTGGAAAGGCCTATCAAGGTGCCCGTAGTCATTCCCGTCTTGATGACACTCATC  
 TCTGTGTTTTTGGTCTGGCTCCAATCATCAGCAAGCCACCTGGGAGTACCTCTACTGTGTGCTGTTTA  
 TATTAAGCGGCCTTTATTTTACTTCTGTTTGTCCACTACAAGTTTGGATGGGCTCAGAAAATCTCAAA  
 GCCGATTACCATGCACCTTCAGATGCTAATGGAAGTGGTCCCACCGAGGAAGACCCTGAG

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>RG205055 representing NM\_014270  
 Red=Cloning site Green=Tags(s)

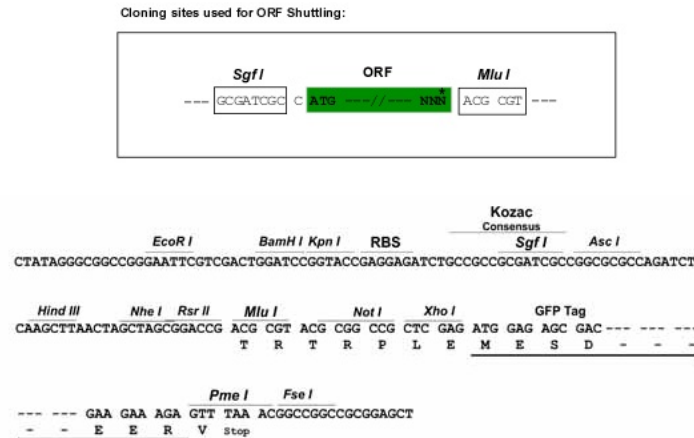
MGDTGLRKRREDEKSIQSQEPKTTSLQKELGLISGISIIIVGTIIGSGIFVSPKSVLSNTEAVGPCLIIWA  
 ACGVLATLGALCFAELGTMITKSGGEYPYLMEAYGPIPAYLFSWASLIVIKPTSFAIICLSFSEYVCAFP  
 YVGCKPPQIVVKLAAAAILFISTVNSLSVRLGSYVQNIFTAAKLIVIVAIISGLVLLAQGN TKNFDNS  
 FEQAQLSVGAISLAFYNGLWAYDGNLNYITEELRNPNRNLPLAIIIGIPLVTACYILMNVSYFTVMTA  
 TELLQSQAVAVTFGDRVLYPASWIVPLFVAFSTIGAANGTCFTAGRLIYVAGREGHMLKVL SYISVRRLT  
 PAPAIIIFYGIIATIIYIPGDINSLVNYFSFAAWLFYGLTILGLIVMRFRKELERPIKVPVPIVPLMTLI  
 SVFLVLAPIISKPTWEYLYCVLFILSGLLFYFLFVHYKFGWAQKISKIPITMHLQMLMEVVPPEEDPE

**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

Sgfl-MluI

## Cloning Scheme:



ACCN: NM\_014270

ORF Size: 1461 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\\_014270.5](#)

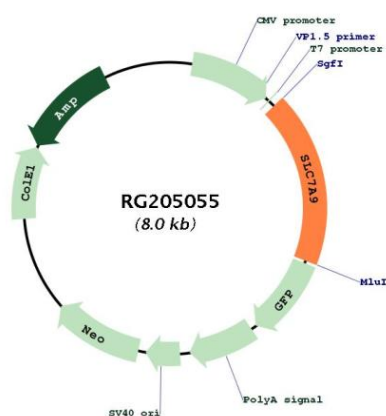
RefSeq Size: 1790 bp

RefSeq ORF: 1464 bp

Locus ID: 11136

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| UniProt ID:       | <u>P82251</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Cytogenetics:     | 19q13.11                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Protein Families: | Druggable Genome, Transmembrane                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Gene Summary:     | This gene encodes a protein that belongs to a family of light subunits of amino acid transporters. This protein plays a role in the high-affinity and sodium-independent transport of cystine and neutral and dibasic amino acids, and appears to function in the reabsorption of cystine in the kidney tubule. Mutations in this gene cause non-type I cystinuria, a disease that leads to cystine stones in the urinary system due to impaired transport of cystine and dibasic amino acids. Alternate transcript variants, which encode the same protein, have been found for this gene. [provided by RefSeq, Jul 2011] |

## Product images:



Circular map for RG205055