

Product datasheet for **MG210027**

Slc3a1 (NM_009205) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Slc3a1 (NM_009205) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Slc3a1
Synonyms:	D2H; NBAT; NTAA; RBAT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>MG210027 representing NM_009205
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGATGAGGACAAAGGCAAGAGAGACCCCATCCAAATGAGTTTGAAGGGATGCCGAACCAATAACGGGT
TTGTCCAAAATGAAGACATTCCGGAGCAGGACCCAGACCCAGGCTCCAGGGACACCCACAGCCCAACGC
CGTGAGTATCCCTGCTCCAGAGGAGCTCACCTAAAGGCGGTGCGGCCCTATGCAGGGATGCCCAAGGAA
GTA CTCTTCCAGTTCTCCGGCCAGGCTCGCTACCGGGTGCCTCCGAGAGATCCTCTTCTGGCTCACCGTGG
TTTCCGTGTTCTGCTCATTGGAGCCACCATAGCCATCATCGTCATCTCTCCAAAATGCCTTGACTGGTG
GCAAGCAGGTCCCATATACCAGATCTACCCGAGGTCTTTTAAGGACAGTGACAAGGATGGGAATGGAGAC
CTGAAAGGTATCCAGGAGAAGCTGGACTATACACTGCTTTAAACATAAAGACTCTTTGGATCACTTCTCT
TTTATAAATCATCTTTGAAAGACTTCAGATACGCTGTTGAGGATTTCAAAGAAAATTGACCCTATTTTTGG
AACAAATGAAAGATTTTGAAGAATTTGGTTGCTGCCATCCATGACAAAGGTTTAAAAATTAATAATTGATTTT
ATACCAAACCACTAGTGACAAACATCCTTGGTTCCAATCGAGTAGGACACGGAGCGGAAAATACACCG
ATTACTACATCTGGCACAACTGTACCCATGTCAACGGTGTAAACCACCCCTCCCAACAACCTGGCTGAGTGT
GTATGGAACTCCAGCTGGCACTTTGATGAAGTACGAAAGCAATGTTATTTTTACCAAGTTTTTGAAGAG
CAACCAGATTTAAATTTCCGAAATCCTGCTGTTCAAGAGGAAATAAAGGAAATAAATACGTTCTGGCTCT
CGAAGGGTGTGATGGGTTTGTGTTGATGCAGTTAAATTTCTTCTGGAAGCGAAGGATCTGAGAAATGA
AATCCAAGTGAATACATCCAAATTCGGACACGGTCAACCACTACTCAGAGCTGTACCATGACTTCACC
ACAACCTCAGGTGGGAATGCATGACATCGTCCGAGACTTCCGGCAGACCATGAACCAAGTACAGCAGGGAGC
CTGGCAGATACCGGTTTCATGGGGCCGAAGCCTCAGCTGAGAGCATCGAGAGGACCATGATGACTATGG
CTTGCCATTTATCCAGGAAGCCGACTTTCTTTCAACAAGTACTTCACCACAATAGGCACTCTCTCTGGG
CATACTGTCTATGAAGTTATCACATCCTGGATGGAAAACATGCCTGAAGGAAAATGGCCCAATTGGATGA
CTGGCGGACCGGAGACTCCTCGGCTGACTTCTCGAGTAGGGAGTGAGTATGTCAACGCCATGCACATGCT
CCTGTTACACTCCCGGGAACGCCATCACTTACTATGGAGAGGAAATCGGGATGGGAGACATTTCCGTT
ACAAATTTCAACGAGAGCTATGATAGTACTACCCTTGTCTCCAAGTACCGATGCAGTGGGACAATAGTT
CCAATGCTGGTTTACTGAGGCCAACACACCTGGCTACCCACAACTCTGACTACCACACCGTCAATGT
GGATGTCCAAAAGACCCAGCCGAGCTCAGCACTGAGGCTGTATCAGGATCTGAGTCTACTCCATGCCACA
GAGCTGGTCTCAGCCGGGGCTGGTTTTGCCTCTTGAGAGACGACAGTCACTCTGTGGTGTACACAAGAG
AGCTGGACGGCATAGATAACGTCTTCTCGTGGTTCTGAATTTTGGAGAATCATCAACTGTGCTAAATCT
ACAGGGGATCATTTAGATCTTCTCCAGAGCTGAGAATAAGGTTAAGTACCAACTCAGCCTCCAAAGGC
AGTGTGTTGACACCCGTGCCATTTCTCTGGAGAAGGGAGAGGGCCTGGTCTTGGAGCACAGCACGAAGG
CTCCCCTCATCAGCAGGCCGCTTTCAGAGACAGATGCTTTGTTTCCAGTCGGGCGTGCTACTCCAGTGC
ACTGGACATCCTCTATAGCTCGTGT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG210027 representing NM_009205
 Red=Cloning site Green=Tags(s)

MDEDKGKRDP IQMSLKG CRTNNGFVQNE DIPEQDPD P GSRDTPQ PNAVSIPAPEEPHLKAVR PYAGMPKE
 VLFQFSQ QARYRVPREILFWLTVVSVFLLIGATIAIIVISPKCLDWWQAGPIYQIYPRSFKDSKDGNGD
 LKGIQEKL DYITALNIKLTWITSFYKSSLKDFRYAVEDFKEIDPIFGTMKDFENLVAAIHDKGLKLIIDF
 IPNHTSDKHPWFQSSRTRS GK YTDYYIWHNCTHVNGVTPPNWLSVYGNSSWHFDEV RKQCYFHQFLKE
 QPDLNFRNPAVQEEIKEIITFWLSKGVDFSFDAVKFLL EAKDLRNEIQVNTSQIPD TVTHYSEL YHDF T
 TTQVGMHDI VRDFRQTMNQYSREPGRYRFMGAEASAESIERTMMYYGLPFIQEADFPFNKYFTTIGT LSG
 HTVYEVITSWMENMP EGKWPNWMTGGPETPRLTSRVGSEYVNAMHMLLFTLPGTPITYYGEEIGMGDISV
 TNFNESYDSTLLVSKSPMQWDNSSNAGFTEANHTWLPTNSDYHTVNV DVQKTQPSSALRLYQDLSLLHAT
 ELVLSRGWFC LLRDDSHSVVYTR ELDGIDNVFLVVLNFGESSTVLNLQGIISDLPPELRIRLSTNSASKG
 SAVDTR AISLEKGEGLVLEHSTKAPLHQQA AFRDRCFVSSRACYSSALDILYSSC

TRTRPLE - GFP Tag - V

Restriction Sites:

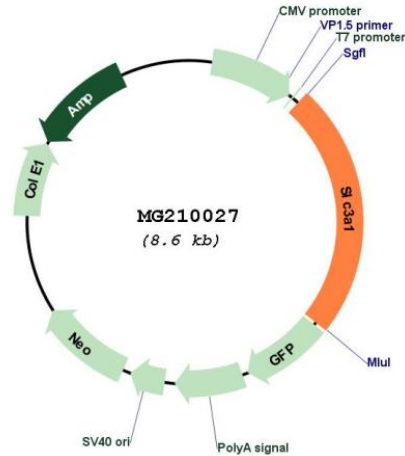
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_009205

ORF Size: 2055 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_009205.2](#), [NP_033231.2](#)

RefSeq Size: 2307 bp

RefSeq ORF: 2058 bp

Locus ID: 20532

UniProt ID: [Q91WV7](#)

Cytogenetics: 17 55.17 cM

Gene Summary: Involved in the high-affinity sodium-independent transport of cystine and neutral and dibasic amino acids (system B(0,+)-like activity). May function as an activator of SLC7A9 and be involved in the high-affinity reabsorption of cystine in the kidney proximal tubule. [UniProtKB/Swiss-Prot Function]