

## Product datasheet for **MG218908**

### **Slc17a5 (NM\_172773) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Slc17a5 (NM_172773) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Slc17a5
Synonyms:	4631416G20Rik; 4732491M05; AST; ISSD; NSD; SD; SIALIN; SIASD; SLD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG218908 representing NM\_172773  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGAGGCCCTCGTTCCGGGTCCGGCGGAAACGACGATGAGGAGAGCTCGGACAGACCCCGCTCCTGC  
 CGGGCGCCCGCAGACCGAAGCGGCTCCAGTGTGCTGCTGCTCGGTACAACTTAGCGATTTTGGCGTT  
 CTGTGGTTTCTTCTGTTCTATGCCTTACGGGTGAACCTGAGTGTGCGTTAGTGACATGGTAGATTCA  
 AATACAACCTGACTGATAATAGAAGCTAAGGAGTGTGCGGAACATTCTGCCCCATAAAAGTTCACC  
 ACAATCACACAGGTAAAAAGTACAAGTGGGATGCAGAACTCAAGGGTGGATTCTCGGCTTTTTTTTTA  
 CGGCTACATCGTCACCCAGATCCCGTGGGTACATTGCCAGCAGGGTCCGAGGGGAAGCTGCTGCTGGC  
 CTGGGCATCTTAGGCACCTCCGCTTACCCTGTTACACCGCTGGCCGAGACTTAGGCGTGGTGACTC  
 TCGTTGTGCTTAGAGCGCTGGAAGGACTGGGAGAGGGTGTACGTTTCCAGCTATGCACGCCATGTGGT  
 TTCTGGGCTCCCTCTGGAAAGAAGCAAGCTTCTTACCATTTCCTATGCGGGAGCACAGCTTGGGACA  
 GTGATCTCACTTCTTCCGGAATAATATGCTACTATATGAACTGGACTTACGCTTCTATCTTTTTG  
 GTATAGTTGGAATTGCTGGTTATTTATGGATGTGGATAGTCAGTGATACACCAGAACTCACAAAGAC  
 AATCTCCATTATGAAAAAGAATACATTGTTTCATCATTAAAAAATCAGCTTCTTCGCAGAAGGTGGT  
 CCGTGGGGTCCATCTTGAAGTCACTGCCACTTTGGGCAATTGTGGTAGCACATTTCTCCTACAAGTGGT  
 CTTTTTACACCTATTGACGCTACTGCCAATTATGAAGGAAATCCTAAGGTTCAATGTTCAAGAGAA  
 CGGGTTTTATCTGCATTGCCTATTTTGGCTGTTGGTTATGCATGATCCTCTGTGGTCAAGCCGCTGAC  
 TATTTAAGGGTCAAGTGAAGTCTTCAACTATAAGCGTTCGGAGAATTTTAGCCTCGTAGGAATGGTTG  
 GCCCTCGGTTTTCTAGTCGCGGCTGGATTTATAGGCTGTGACTATTCCTTGGCGTTGCGTTCCTAAC  
 CATATCCACGACGCTGGGAGGCTTCGCCTCTTCTGGATTAGCATCAACCATCTGGATATCGCTCCTTAC  
 TATGCTGGCATCCTTGGGCATCACAACACGTTTGCCACTATCCCGGATGACGGGACCCATCATTG  
 CTAAGTCTGACCCCTGATAACACTATTAGGGAATGGCAGACTGCTTCTGTATCGCTGCTGCTATTAA  
 CGTGTGGGGCCATTTCTTACGCTGTTTGCCAAAGGGGAAGTGCAGAGCTGGGCTCTCAGTGACCAC  
 CACGGACACAGAAAC

**ACGCGTACGCGGCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:**

>MG218908 representing NM\_172773  
 Red=Cloning site Green=Tags(s)

MRPLLRRPAGNDDEESSDSTPLLPGARQTEAAPVCCSARYNLAIALFCGFFVLYALRVNLSVALVDMVDS  
 NTTLTDNRTSKECAEHSAPIKVHHNHTGKKYKWAETQGWILGSFFYGYIVTQIPGGYIASRVGGKLLLG  
 LGILGTSVFTLFTPLAADLGVVTLVVLRALEGLGEGVTFPAMHAMWSSWAPPLERSKLLTISYAGQLGT  
 VISLPLSGIICYMNTYVFYLFIVGIVWFILWMWIVSDTPETHKTISHYEKEYIVSSLKNQLSSQKVV  
 PWGSILKSLPLWAIIVAHFSYNWSFYLLTLLPTYMKEILRFNVQENGFLSALPYFGWLCMILCGQAAD  
 YLRVKWNFSTISVRRIFSLVGMVGPVFLVAAGFIGDYSLAVAFLLISTTLGGFASSGFSINHLDIAPS  
 YAGILLGITNTFATIPGMTGPIIAKSLTPDNTIREWQTVFCIAAAINVFGAIFFTLFAKGEVQSWALSDH  
 HGHRN

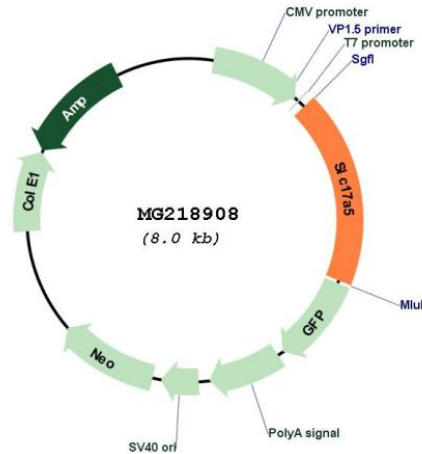
**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

Sgfl-Mlul



## Plasmid Map:



ACCN: NM\_172773

ORF Size: 1485 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\\_172773.3](#), [NP\\_766361.1](#)

**RefSeq Size:** 3201 bp

**RefSeq ORF:** 1488 bp

**Locus ID:** 235504

**UniProt ID:** [Q8BN82](#)

**Cytogenetics:** 9 E1

**Gene Summary:** Transports glucuronic acid and free sialic acid out of the lysosome after it is cleaved from sialoglycoconjugates undergoing degradation, this is required for normal CNS myelination. Mediates aspartate and glutamate membrane potential-dependent uptake into synaptic vesicles and synaptic-like microvesicles. Also functions as an electrogenic 2NO(3)(-)/H(+) cotransporter in the plasma membrane of salivary gland acinar cells, mediating the physiological nitrate efflux, 25% of the circulating nitrate ions is typically removed and secreted in saliva (By similarity).[UniProtKB/Swiss-Prot Function]