

## Product datasheet for **MC206185**

### Slc1a3 (BC058711) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Slc1a3 (BC058711) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Slc1a3
Synonyms:	GLAST-1, GLAST, MGLuT1, GluT-1, GLU-T
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)

Fully Sequenced ORF: >BC058711  
 CGTCCATGTGTGTGAGCGCTTTAGTTTTCGATTCTCTCAGGTCCTGATTTTGC GTTTCTAATATAAGTGA  
 ACTAACAAGGCGTGAACGTGGTCTACGGAGCAAAACAAAGCCATAAAGCGTGCTTCTGTGGTGCCAAGAT  
 TAATCAATATTCCGGGGAGCTCGGGCTCCCCCTCCTCCTGCTGTTTTTCATTTTCCCACTCCCCCTTCC  
 CCAGTACAGGCTCCTCCTTTTTCTTAAGTTGCCTGATAGTAAGTGGCGTTTCAGAGCACATGCATGTT  
 GTCAGGGCCAGCCTGCTCCGCCGCTCGCTAAGCTGTTACTCCGAGCTACCTGCTGGGGAATTCACCTCCA  
 CGTAGCCCGGGTGTCTTCTCCATCCCAGAGTCAGAAAAGTTGCTCTCTAACACCAAGAGGAGAA  
 TTCCTTTCTGGGAACAAGTGAAGACTGACACGCAAGGACGTGATAAATTCAGAAAAGATAAAAATA  
 TGACAAAAGCAACGGAGAAGAGCCTAGGATGGGGGCGAGGATGGAGAGATTGCAGCAAGGGGTCCGCAA  
 GCGGACACTTCTGGCCAAGAAGAAAGTTACAGGCCTACCAAGGAAGATGTTAAGAGTTACCTGTTTCGG  
 AATGCCTTCGTTCTGCTCAGGTCAGTGTGCTTGTGGGTACAATCCTTGGATTTGCCCTCCGACCGT  
 ATAAAATGAGCTACCGGGAGGTGAAGTACTTTTCGTTCCCTGGGAGCTTCTCATGAGGATGCTGCAGAT  
 GCTGGTCTTGCCCTGATCATCTCCAGTCTCGTCACAGGAATGGCGGCCCTAGATAGTAAGGCATCCGGG  
 AAGATGGGGATGCGCGCTGTAGTCTATTACATGACTACTACCATCATTGCTGTGGTGATTGGCATAATCA  
 TTGTATCATCATCCACCCCGAAAGGGCACAAGGAAAACATGTACAGAGAAGGTAAAATCGTGCAGGT  
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 AAACAGTTTAAAACCAGCTACGAGAAAAGAAGCTTTAAAGTGCCTATCCAGTCCAACGAAACACTTCTGG  
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 GGAACATGAAGGAGCAGGGGCAAGCGCTGAGAGAGTTCTTTGATTCTCTTAACGAAGCCATCATGCGAT  
 TGGTCCGGTGATAATGTGGTATGCGCCTCTGGGCATCCTCTTCTTGTGTCAGGGAAGATTGTTGAGAT  
 GGAAGACATGGGTGTGATTGGGGGACAGCTTGCCATGTACACCGTGACAGTCATTGTGCGCCTCCTCATT  
 CACGCCGTATCGTCTGCTCTCCTCTACTTCTGGTAACCCGGAAGAACCCTGGGTTTTTCATTGGAG  
 GGTGCTGCAAGCGCTCATCACAGCCCTTGGGACCTCCTCAAGTTCTGCCACCCTACCCATCACTTTCAA  
 GTGCTGGAAGAGAACAATGGTGTGGACAACGCATCACCAGATTTGTGCTCCCGTGGGGGCCACCATT  
 AACATGGATGGGACCGCCTCTACGAGGCTTTGGCTGCCATTTTCATCGCTCAAGTGAACAACCTTTGACC  
 TGAACCTTTGGACAGATTATAACAATAAGCATCACAGCCACGGCCGAAGCATCGGGGCGAGCCGGATTCC



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TCAGGCCGGTCTGGTCACCATGGTCATCGTGCTGACATCTGTGGGCCTGCCACAGATGACATCACACTC  
 ATCATTGCAGTGGACTGGTTTCTGGACCGCTCCGAACCACCACCAACGTACTGGGTGACTCCCTCGGAG  
 CAGGGATTGTCGAGCACTTGTCCCGACATGAACTGAAGAACCAGATGTTGAAATGGGAACTCGGTGAT  
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 GACAGCGAAACCAAGATGTAGACGGACAGAGAAGTGCTTCTTAAGCACCAAGTGTGGAACTGTTCTA  
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 TTTAAGTCATTTTCAATTATTCTTACCAAGTAAGCTACTACAATCAAACAGTTTTTCGATATTACCAATT  
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 TGAGGCTCCCAATGGTCTAGAGTGAGCCTTGTCTCATCCATTGGCCTCAGTGTCTCATCCGAAATG  
 AGTGACTCTAGACAGGCTCTTAGCCAAACTTCTGGAACATCAGGAAGGACCCTGCCCTGTACACC  
 ATGAGGATCTCAGACAGGACACTTATTGGGAATGGACATTTCTCTTAGGGGCAGGCTGTGTGGCTCA  
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 CCTGTTTTGTTTTCCAATACTAGAGGCCCTCCCTTCTGGGGTACACTTCCCAATCCAAGGGAAGACAGT  
 CTCTTCAATTAGATGTCTAGGAAATAAAGAGAAGACTAGCAAGTGTGCTCAAGTCTTAGTGTGGAACACT  
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 TTGGTTTTCTTTAAAGACTAAAAAGGAGAGCTATATCTCAACCCTTTTTCTGTTAGCCTAAACACTTCT  
 CTTAGTCCCTAATCAGCCCCAAAGAAACGACGTCATAACACCATTCTCCTCATCTCCAGTCCAAC  
 CAACCACATCTCTGGGACAGATCCATACGCTGGGTGGATGGTCTCATTCTGAAAAAGATTTTTTTTTT  
 TGGTTTTTTTATTGTTTTGTTTTTACTATTTTAAACCAGGCTTCTTAGGATGACAAAAACAACATACTC  
 TTTTTGTATAGAGATGTCTCTTGACAAATCATTCAAAGTCTCATCTAGAGTGGAGTGTCTGTTTTAT  
 GTCCTACCAAAAAAAAAAAAAAAAAAGACAGATGAATCAGCATGAGGATAACATCACTGAGGATGGA  
 AGAAAAACAGCAGGAGAATTCTTTTTCAGGCGAGGAGCTCCAGGTTTAAAAGAGATTATTTACTCC  
 CTTAGGAATATCCAATCAAAGATACTCAGTGAGAGCCATCTGACAGTACCAGCTGCTTACAGACTTCTGA  
 GCGAAATGATGAATGGACATAATTATGCTAACAGACTGAGCATCTAGAATGGCATCTCCAGTCTACAG  
 TTAGAGATAATTTCTAGAGATCCTGAGCATCCCATGTATAGAAAGGTTAACTACTAGGCTGCGGGGGAGTA  
 ATCATTTAATGGCAAGCTCTATTTGGGAAATACACTACAGAGGTTAATCTATGTGGCAGTCATTTTTCGA  
 CACTAGTTGAACAGACCTTAATCGCATCAAATTAATGCTGTTTACCCGGTGTGATTTTTTTATACTAAC  
 CATTTCTTACAGAAACAGATTACAAGGTGATCCTTTTGTCTGGTCCATCCCGGGCTCTGCCTATGTGTG  
 TACCCACTGTGGACTGGGAACTTCACTTTGTAGATGATTTTCAATAAAGAAAAAATAGTTTTACATTA  
 AAAAAAAAAAAAAAAAAA

- Restriction Sites:** Ascl-NotI
- ACCN:** BC058711
- Insert Size:** 1632 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- 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:** [BC058711](#), [AAH58711](#)

**RefSeq Size:** 4147 bp

**RefSeq ORF:** 1632 bp

**Locus ID:** 20512

**Cytogenetics:** 15 3.82 cM

**Gene Summary:** Sodium-dependent, high-affinity amino acid transporter that mediates the uptake of L-glutamate and also L-aspartate and D-aspartate (PubMed:7903437, PubMed:28032905). Functions as a symporter that transports one amino acid molecule together with two or three Na(+) ions and one proton, in parallel with the counter-transport of one K(+) ion (By similarity). Plays a redundant role in the rapid removal of released glutamate from the synaptic cleft, which is essential for terminating the postsynaptic action of glutamate (PubMed:15363892, PubMed:15390100, PubMed:16880397).[UniProtKB/Swiss-Prot Function]