

Product datasheet for **MG210174**

Slc44a4 (NM_023557) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Slc44a4 (NM_023557) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Slc44a4
Synonyms:	2210409B01Rik; mTPPT1; NG22
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>MG210174 representing NM_023557
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGGAGAAAGCAGAATGAGAACGAGGCTCACGGGAATTCGGCCAAATATGACCCCTCCTTTCGAGGCC
 CCATCAAAAACAGGGGCTGCACAGACATCATCTGCTGTGCTCCTTCTGATCTTCAATTTGGGTTACAT
 CATAAGTGGGGCTTGTGGCCTGGGTGATGGAGACCCTCGCAAGTCTACCCAGAACTCCACGGGG
 GCCTACTGCGGGCTGGGCGACAACAAGGATAAACCCCTACGTTCTATACTTCGACATCTTAAGCTGTGCGG
 CAGCTATCAACATCATCTCCATCGCTGAGAATGGCCTACAGTGCCCCACACCCAGGTGTGCGTCTTTC
 CTGCCACTGGCCCCATGGGCTGTGGAGGTGTTCCAGTCTCAAAGACAGTCGGTGAAGTTTATGGTGAA
 AGGAGAACTTTTGTCTCCAGCGGTGTCCCAGATATGATAGTGGAGGAGGCCTGCAGAAGGGACTCT
 GTCCCCGTTTCTTCTTCTTCTACTCCAGCTCTGGGACGTTGTTTCCACTCCCAACATCAACTTCAC
 GTTACCTGAAGACTTACGGATCAATAACACCACCGTCTCTAATGGCATCAGTGGCCTCCTGGACAGCATC
 AATGCCCGGGATGTCTGTGAAGATCTTTGAAGATTTTGCCACGCTCTGGTACTGGATTCTCGTAGCGC
 TGGGTGTGGCCCTGGCACTAAGTCTGCTGTTTCCTCCTCCTGCGCCTGGTGGCGGCACCCCTGGTGT
 GCTGCTGATTGTGGGGTGTCTGCTGCTCGCCTATGGCATCTACCACTGCTGGCAACAGTACCAAGTG
 TTTCCGGACAAGGGCGCCTCCATCACCAACTGGGCTTCACTACCAACTCAGTGCCTACCAGAGTGTGA
 AGGAGACTTGGCTGGCTGCTTTGATTGTCTGGCTGTCTGGAGGGCATCTTGTGCTTATGCTCATTTT
 CCTGCGCCAGAGGATCCGGATCGCCATCGCTCTGCTGAAGGAAGCCAGCAGGGCTGTGGGGCAGATGATG
 TCAACTATGTTTACCCTCTGGTCACCTCGTCTCTGGTCATTTGCATTGGTTACTGGGCCGTGACAG
 CTCTATACCTGGCCACATCCGGCAACCCAGTACATCTACTGGGCGTCCAACACCAGTACACGGGGTGT
 TGAGAACGTTTCTGTGAACATGACTTGTGACCCGATGGCCCGTTGAATTCCTCGTGCCCAACCTCAAG
 TCGCTCTTCAAGGGCTACTCGACCACGGGCTAGCTCAGCGTTCTCTTCAACCTGCAAACTACGGAG
 TCCTGGGGCTCTTCTGGACTGTTAACTGGTACTGGCCCTGGGCCAGTGTGCTTGGCCGGGCCTTCGC
 CTCTTTCTACTGGGCCTTTCACAAGCCTCGAGACATCCCTACCTTCCCTTGGAGCTCAGCCTTTCATCCGC
 AACTCCGTTACCACACTGGCTCACTGGCGTTGGAGCCCTCATCCTGTCCCTTGTGAGATAGCCCGGG
 TTATCCTGGAGTATATCGACCACAAGCTAAGAGGATCCCAGAACCCTGTGGCCGCTGCATCATCTGCTG
 CTTCAAGTGTGCTCTGGTGTCTGGAGAAGTTTATTAAGTTCCTCAACCGCAATGCCTACATCATGATC
 GCCATCTATGAAAGAATTTTTGTGTCTCGGCCAAAATGCCTTCATGCTGCTCATGAGGAATGTTCTCA
 GGGTCGTGCTCCTGGATAAAGTCACTGATCTGCTGCTGTTCTTTGGGAAGCTGTGGTGGTTGGAGGTGT
 CGGCGTCTGTCTTCTTCTTTTCTCCGGTCTGATCAAGGGGCTGGGGAAGACTTTGAGAACCCCAAC
 CTCAACTATTATTGGCTGCCATCATGACCTCCATCATGGGAGCCTACGTCATTGCCAGTGGCTTCTTCA
 GCGTCTTTGGAATGTGTGTAGATACGCTCTTCTCTGCTTCTCGAGGACCTGGAGAGAAATGATGGTTC
 CCAGGAGCGGCCTTACTACATGCCCAAGGCACTCTGAAGATTCTGGCAAGAAGAATGAGGCACCTACA
 GGGGAAAGACCAGGAAGAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG210174 representing NM_023557
 Red=Cloning site Green=Tags(s)

MGRKQNEAEHGNsAKYDPSFRGPIKNRGCTDIICCVLFLIFILGYIIVGLVAWVYGDPRQVLYPRNSTG
 AYCGVGDNDKPYVLYFDILSCAAAINIISIAENGLQCPTPQVCVSSCLAPWAVEVFQFSKTVGEVYGE
 RRNFCLPAVSPDMIVEESLQKGLCPFRLLPSTPALGRCFPLPNINFTLPEDLRINNTTVSNGISGLLDSI
 NARDVSVKIFEDFAQSWYWILVALGVALALSLLFILLRLVAAPLVLLIIVGVLAVLAYGIYHCWQQYQV
 FRDKGASITQLGFTTNFSAYQSVKETWLAALIVLAVLEGILLMLIFLRQIRIAIALLKEASRAVGQMM
 STMFYPLVTFVLLVICIGYWAVALYLATSGQPQYIYASNTSTPGCENVPVNMTCDPMAPLNSSCPNLK
 CVFKGYSTTGLAQRSLFNLQIYGVGLFWTVNWWLALGQCVLAGAFASFYWAFHKPRDIPTFPLSSAFIR
 TLRHYTGSLAFGALILSLVQIARVILEYIDHKLGRSQNPVARIICCFKCLWCLEKFIKFLNRNAYIMI
 AIYGNFCVSAKNAFMLLRNVLRVVLDKVTDLLLFFGKLLVVGCVGLSFFFFSGRIKGLGKDFENPN
 LNYWLPIMTSIMGAYVIASGFFSVFGMCDTLFLCFLEDLERNDGSQERPYYMPKALLKILGKNEAPT
 GGKTRKK

TRTRPLE - GFP Tag - V

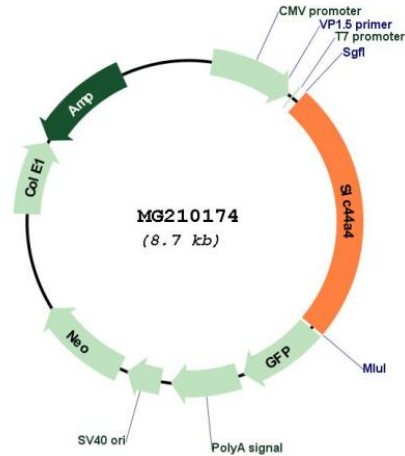
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_023557

ORF Size: 2121 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_023557.3](#), [NP_076046.1](#)

RefSeq Size: 2345 bp

RefSeq ORF: 2124 bp

Locus ID: 70129

UniProt ID: [Q91VA1](#)

Cytogenetics: 17 B1

Gene Summary: Choline transporter that plays a role in the choline-acetylcholine system and is required to the efferent innervation of hair cells in the olivocochlear bundle for the maintenance of physiological function of outer hair cells and the protection of hair cells from acoustic injury (By similarity). Also described as a thiamine pyrophosphate transporter in colon, may mediate the absorption of microbiota-generated thiamine pyrophosphate and contribute to host thiamine (vitamin B1) homeostasis (PubMed:24379411).[UniProtKB/Swiss-Prot Function]