

Product datasheet for **MG223891**

Slc12a7 (NM_011390) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Slc12a7 (NM_011390) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Slc12a7
Synonyms:	AA408796; D13Ertd261e; Kcc4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG223891 representing NM_011390 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCACGAACCTTACGGTGGTGCCGGTGGAGGCGCGCCGACGGCGCCGGGGACGAAGCTGCTGAGC
GCACGGAAGAACCCGAGTCTCCCAGAGCGTGGATCAAACCTCCCCTACGCCGGGAGATGGAACCCAG
GGAAAACAGCCCTTTCATCAATAATGTGGAGGTGGAAAGAGAGAGCTACTTCGAGGGGAAGAACATGGCA
CTTTTTGAGGAAGAGATGGACAGCAACCCCATGGTGTCACTGCTGAACAAGCTGGCCAACATAACCA
ACCTGAGCCAGGGTGTGGTAGAGCATGAGGAAGATGAGGACAGCCGGAGGCGAGAGGTCAAGGCCACAG
CATGGGCACCTTCATCGGAGTCTACCTGCCGTGCCTGCAGAACATCTTGGGTGTTATCCTTTCCCTGCGT
CTGACCTGGATTGTGGGGCAGCTGGTGTATGGAGTCCCTCCTCATTGTGGCCATGTGCTGCACCTGTA
CAATGCTGACAGCCATCTCCATGAGCGCCATCGCTACCAACGGCGTGGTCCCAGCGGGAGGCTCGTACTA
CATGATCTCCCGTTCGCTGGGGCCTGAGTTGGAGGTGCTGTTGGCCTGCTTCTACTTGGGCACGACA
TTTGCAGGCGCCATGTACATCCTGGGTACCATCGAGATCTTCTGACCTACATCTCTCCAAGTGGCGCA
TCTTCCAGGCAGAGACGGCGGATGGCGAGGCGGCCGACTGTTGAACAACATGCGTGTGTATGGCAGCTG
TGCCCTGGCACTCATGGCGGTGGTGGTCTTTGTGGTGTCAAATATGTCAAACAAGCTGGCACTGGTCTTC
TTAGCCTGTGTTGTGCTTCTATCCTGGCCATCTATGCTGGTGTCAAGACAGCCTTTGCCACCTG
ACATCCCCTGCTGCCTTCTAGGGAACCGCACGCTGGCAAATCGCAACTTTGATACCTGTGCCAAGATGCA
GGTTGTACAGAACGGTACAGTGACCACTGCACTCTGGCGCCTCTCTGCAATGGTCCAGCTTGGGTGCC
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TCTTCTGGATAACCTGTGGAGCACAATTCAGACAAGGGGGCATTGTGGAAAAGAAAGGTGTGCTCCTC
AGTGCCTGTGTCGAGGAGAGCCGGCCTGGTGGATTGCCATACGTCCTCACAGACATCATGACCTACTTC
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TTCTGCATAGTCTGTTGGGGCTGCATTGAAGGTGTAGTCCGCGAGATAAGTTGGGGAGGCCTTG



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CAAGGGAACCTGGTCATTGGCATGCTGGCCTGGCCATCTCCCTGGGTATTGTGATTGGCTCCTTCTTCT
 CCACCTGTGGTGTGGCCTGCAGAGCCTGACTGGGGCACCCCGCTACTGCAGGCCATTGCGCGTGACGG
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 CCTGGCCAGAGGCTTGAAGGAGGCAGATAATCCTTTCTCTGGAAGAACTTTGTAGACACAGTCCGTGA
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 TCTCAACAAGTCCAGGATGCCCAACTGGTCTGCTGAATATGCCAGGCCCCCAAAAAGTCCGGCAGGGG
 GACGAGAACTACATGGAGTTCCTCGAGGTCTGACGGAAGGGCTGAACAGGGTCTCTGCTCAGGGGTG
 GTGGCCGAGAAGTCATCACCATCTACTCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG223891 representing NM_011390
 Red=Cloning site Green=Tags(s)

MPTNFTVVPVEARADGAGDEAAERTEEPESPEVDQTSPTPGDGNPRENSPFINNVEVERESYFEGKNMA
 LFEEEMDSNPMVSSLLNKLANYTNLSQGVVEHEEDEDSSRRREVKAPRMGTFIGVYLPCLQNILGVILFLR
 L TWIVGAAGVMESFLIVAMCCTCTMLTAISMSAIATNGVVPAGGSYIMISRSLGPEFFGGAVGLCFYLGTT
 FAGAMYILGTIEIFLTYISPSAIFQAETADGEEAALLNMRVYGSALALMAVVVFGVKYVVKLALVF
 LACVVL SILAIYAGVIKTAFAAPPDIPVCLLGNRTLNRNFDTCAKMQVVSNGTVTTALWRLF CNGSSLGA
 TCDEYFAQNVNTEIQGIPGVASGVFLDNLWSTYSKGFVEKKGVSVPVSEESRPGGLPYVLTDMTYF
 TMLVGIYFPSVTGIMAGSNRSGDLKDAQSIPTGTILAIVTTSFYLSIIVLFGACIEGVLRDKFGEAL
 QGNLVI GMLAWPSPWVIVIGSFFSTCGAGLQSLTGAPRLLQAIARDGIIPFLQVFGHGKANGIPTWALLL
 TALICETGILIASLDSVAPILSMFFLMCYMFVNLACAVQTLRLTPNWRPRFKFYHWLTSFLGMSLCLALM
 FICSWYYALFAML IAGCIYKYIEYRGAKEWGDGIRGLSLNAARYALLRVEHGPHTKNWRPQV LMLNL
 DSEQCVKHPRLLSFTSQLKAGKGLTIVGSVLEGTYLDKHVEAQRAEENIRSLMSAEKTKGFCQLVSSNL
 RDGASHLIQSAGLGGMKHNTVLMWPEAWKEADNPF SWKNFVDTVRDTTAAHQALLVAKNIDLFPQNQER
 FSDGNIDVWVIVHDGGMMLLPFLLRQHKVWRKCRMRIFTVAQVDDNSIQMKKDLQMFYLHLRISAEVEV
 VEMVENDISAFTEKTLMMEQRSQMLKQMLSKNEREREAQLIHDRNTASHTTATARTQAPPTPKVQMT
 WTKEKLI AEKHRNKDTGPSGFKDLFSLKPDQSNVRRMHTAVKLNGLVVLNKSQDAQLVLLNMPGPPKSRQG
 DENYMEFLEVLTEGLNRVLLVRGGGREVITIYS

TRTRPLE - GFP Tag - V

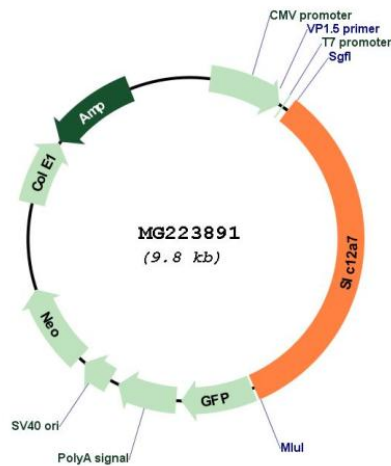
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_011390

ORF Size: 3249 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:	<ol style="list-style-type: none">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:	<u>NM_011390.2</u> , <u>NP_035520.1</u>
RefSeq Size:	5131 bp
RefSeq ORF:	3252 bp
Locus ID:	20499
UniProt ID:	<u>Q9WVL3</u>
Cytogenetics:	13 40.15 cM
Gene Summary:	Mediates electroneutral potassium-chloride cotransport when activated by cell swelling (By similarity). May mediate K(+) uptake into Deiters' cells in the cochlea and contribute to K(+) recycling in the inner ear. Important for the survival of cochlear outer and inner hair cells and the maintenance of the organ of Corti. May be required for basolateral Cl(-) extrusion in the kidney and contribute to renal acidification.[UniProtKB/Swiss-Prot Function]