

## Product datasheet for MR223891

### Slc12a7 (NM\_011390) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Slc12a7 (NM\_011390) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Slc12a7  
**Synonyms:** AA408796; D13Ertd261e; Kcc4  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >MR223891 representing NM\_011390  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGCCACGAACCTTACGGTGGTGCCGGTGGAGGCGCGCCGACGGCGCCGGGGACGAAGCTGCTGAGC  
 GCACGGAAGAACCCGAGTCTCCCAGAGCGTGGATCAAACCTCCCCTACGCCGGGAGATGGAACCCAG  
 GAAAAACAGCCCTTTCATCAATAATGTGGAGGTGGAAAGAGAGAGCTACTTCGAGGGGAAGAACATGGCA  
 CTTTTTGGAGGAAGAGATGGACAGCAACCCCATGGTGTCACTGCTGAACAAGCTGGCCAACATAACCA  
 ACCTGAGCCAGGGTGTGGTAGAGCATGAGGAAGATGAGGACAGCCGGAGGCGAGAGGTCAAGGCCACAG  
 CATGGGCACCTTCATCGGAGTCTACCTGCCGTGCCTGCAGAACATCTTGGGTGTTATCCTTTTCCCTGCGT  
 CTGACCTGGATTGTGGGGCAGCTGGTGTATGGAGTCCCTCCTCATTGTGGCCATGTGCTGCACCTGTA  
 CAATGCTGACAGCCATCTCCATGAGCGCCATCGCTACCAACGGCGTGGTCCCAGCGGGAGGCTCGTACTA  
 CATGATCTCCCGTTCGCTGGGGCCTGAGTTGGAGGTGCTGTTGGCCTGCTTCTACTTGGGCACGACA  
 TTTGCAGGCGCCATGTACATCCTGGGTACCATCGAGATCTTCTGACCTACATCTCTCCAAGTGGCGCA  
 TCTTCCAGGCAGAGACGGCGGATGGCGAGGCGGCCGACTGTTGAACAACATGCGTGTGTATGGCAGCTG  
 TGCCCTGGCACTCATGGCGGTGGTGGTCTTTGTTGGTGTCAAATATGTCAAACAAGCTGGCACTGGTCTTC  
 TTAGCCTGTGTTGTGCTTTCTATCCTGGCCATCTATGCTGGTGTCAAGACAGCCTTTGCCCCACCTG  
 ACATCCCCTGCTGCCTTCTAGGGAACCGCACGCTGGCAAATCGCAACTTTGATACCTGTGCCAAGATGCA  
 GGTTGTACAGAACGGTACAGTGACCACTGCACTCTGGCGCCTCTCTGCAATGGTCCAGCTTGGGTGCC  
 ACCTGTGATGAGTACTTTGCACAGAACAACGTTACTGAGATACAGGGCATCCCTGGTGTGGCCAGTGGTG  
 TCTTCTGGATAACCTGTGGAGCACATATTAGACAAGGGGGCATTGTGGAAAAGAAAGGTGTGCTCCTC  
 AGTGCCTGTGTCGAGGAGAGCCGGCCTGGTGGATTGCCATACGTCCTCACAGACATCATGACCTACTTC  
 ACCATGCTAGTTGGCATCTACTCCCGTCTGTAAGTGGGATCATGGCAGGATCCAACCGCTCCGGGGACC  
 TCAAAGACGCCAGAAGTCTATTCCAACAGGGACCATTCTGGCCATCGTACTACATCTTTCATTTATCT  
 TTCTGCATAGTCTGTTGGGGCTGCATTGAAGGTGTAGTCCGCGAGATAAGTTGGGGAGGCCTTG



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CAAGGGAACCTGGTCATTGGCATGCTGGCCTGGCCATCTCCCTGGGTATTGTGATTGGCTCCTTCTTCT  
 CCACCTGTGGTGTGGCCTGCAGAGCCTGACTGGGGCACCCCGCTACTGCAGGCCATTGCGCGTGACGG  
 AATCATCCCCTTCTACAGGTGTTTGGTCATGAAAGGCCAACGGGGAGCCACATGGGCCCTGTGCTC  
 ACGGCTCATCTGTGAGACCGGTATCCTCATCGCCTCCCTGGACAGTGTGGCCCCATCCTGTCCATGT  
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 GCTGCGTGTGGAACATGGGCCCCACATACCAAGAACTGGAGGCCCCAGGTGTTGGTGTGCTGAACCTG  
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 TGACCATCGTGGGATCTGTGCTAGAGGGCACCTACTTAGACAAGCATGTGGAGGCCAGAGGGCTGAAGA  
 GAATATCCGGTCTCTGATGAGTGCAGAGAAGACGAAGGGCTTCTGCCAGCTGGTGGTGTCTCCAACCTG  
 CGAGATGGTGGTCCCACCTGATCCAGTCGGCTGGCCTCGGTGGCATGAAACACAACACTGTCCTCATGG  
 CCTGGCCAGAGGCTTGAAGGAGGCAGATAATCCTTTCTCTGGAAGAACTTTGTAGACACAGTCCGTGA  
 CACTACAGCAGCACATCAGGCCCTTGTGGTGGCCAAGAACATTGACTTATCCCACAAAACCAAGAGCGC  
 TTCAGCGACGGGAACATTGATGTGTGGTGGATCGTGCATGACGGGGCATGCTCATGCTTCTGCCCTTC  
 TGCTGCGCCAGCACAAGGTGTGGCGAAAGTGCCGGATGCGCATCTTCACTGTGGCCAGGTGGATGATAA  
 CAGCATCCAGATGAAGAAGGACCTGCAGATGTTCTGTACCACCTCAGGATCAGTGCCGAGGTGGAGGTG  
 GTGGAGATGGTTGAAAATGATATTTCCGCATTACCTATGAGAAGACGCTAATGATGGAGCAGAGGTAC  
 AGATGCTGAAACAGATGCAGTTGTCAAAGAATGAGCGGGAGAGAGAGGCCAGCTGATTCATGACAGGAA  
 CACTGCATCCCATACCACAGCACTGCTAGAACCAAGCCCCACCAACACCCGACAAAGTGCAGATGACA  
 TGGACGAAAGAGAAACTCATTGCAGAGAAACACAGGAACAAGGACACTGGCCATCAGGCTCAAAGACC  
 TCTTCAGCCTAAAGCCGACCACTCAACAGTCAGGAGGATGCATACTGCTGTGAAGCTCAACGGCGTAGT  
 TCTCAACAAGTCCAGGATGCCCAACTGGTCTGCTGAATATGCCAGGCCCCCAAAAAGTCGGCAGGGG  
 GACGAGAACTACATGGAGTTCCTCGAGGTCTGACGGAAGGGCTGAACAGGGTCTCTGCTCAGGGGTG  
 GTGGCCGAGAAGTCATACCATCTACTCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR223891 representing NM\_011390  
 Red=Cloning site Green=Tags(s)

MPTNFTVVPVEARADGAGDEAAERTEEPESPEVDQTSPTPGDGNPRENSPFINNVEVERESYFEGKNMA  
 LFEEEMDSNPMVSSLLNKLANYTNLSQGVVEHEEDEDSSRRREVKAPRMGTFIGVYLPCLQNLGVILFLR  
 LTWIVGAAGVMESFLIVAMCCTCTMLTAISMSAIATNGVVPAGGSYYMISRSLGPEFGGAVGLCFYLGT  
 FAGAMYILGTIEIFLTYISPSAIFQAETADGEAAALLNMRVYGSALALMAVVVVFVGVKVVNKLALVF  
 LACVVLILAIYAGVIKTAFAAPPDIPVCLLGNRTLNRNFDTCAKMQVVSNGTVTALWRLFVCGSSSLGA  
 TCDEYFAQNNVTEIQGIPGVASGVFLDNLWSTYSDKGAFVEKKGVSVPVSEESRPGGLPYVLTDMITYF  
 TMLVGIYFPSVTGIMAGSNRSGDLKDAQKSIPTGTILAIIVTTSFIYLSCLVIFGACIEGVVLRDKFGEAL  
 QGNLVIIGMLAWPSPWVIVIGSFFSTCGAGLQSLTGAPRLLQAIARDGIIPFLQVFGHGKANGEPTWALLL  
 TALICETGILIASLDSVAPILSMFFLMCYMFVNLACAVQTLRLTPNWRPRFKFYHWTLSFLGMSLCLALM  
 FICSWYYALFAML IAGCIYKYIEYRGAKEWGDGIRGLSLNAARYALLRVEHGPHTKNWRPQVLMNL  
 DSEQCVKHPRLLSFTSQLKAGKGLTIVGSVLEGTYLDKHVEAQRAEENIRSLMSAEKTKGFCQLVVSSNL  
 RDGASHLIQSAGLGGMKHNTVLMWPEAWKEADNPF SWKNFVDTVRDTTAAHQALLVAKNIDLFPQNQER  
 FSDGNIDVWVIVHDGMLMLLPFLLRQHKVWRKCRMRIFTVAQVDDNSIQMKKDLQMFLYHLRISAEVEV  
 VEMVENDISAFTEKTLMEQRSQMLKQMLSKNEREREACL IHDRNTASHTTATARTQAPPTPKVQMT  
 WTKEKLI AEKHRNKDTGPSGFKDLFSLKPDQSNVRRMHTAVKLVGVVNLKSQDAQLVLLNMPGPPKSRQG  
 DENYMEFLEVLTEGLNRVLLVRGGGREVITIYS

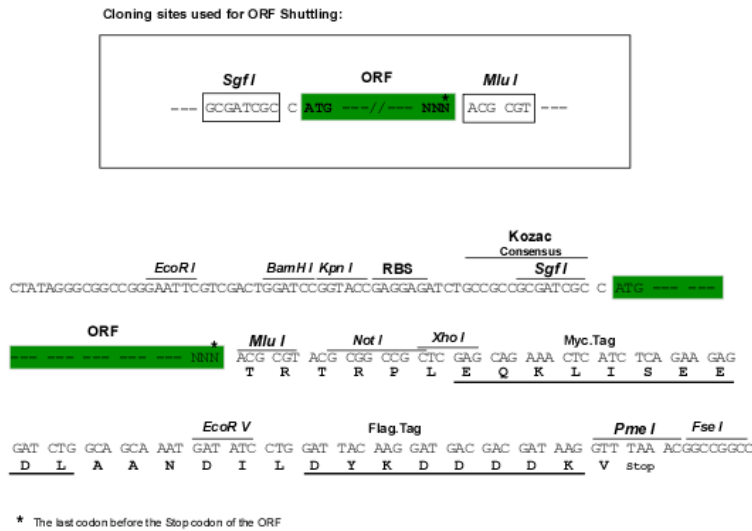
TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mm9011\\_h10.zip](https://cdn.origene.com/chromatograms/mm9011_h10.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:



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:

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\\_011390.2](#), [NP\\_035520.1](#)

RefSeq Size: 5131 bp

RefSeq ORF: 3252 bp

Locus ID: 20499

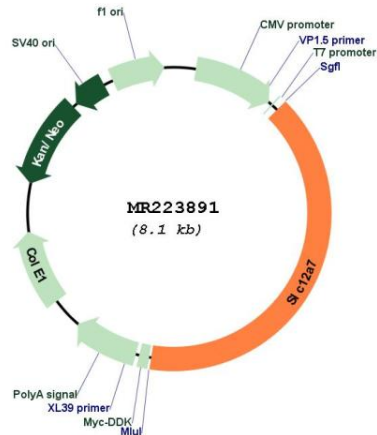
UniProt ID: [Q9WVL3](#)

Cytogenetics: 13 40.15 cM

MW: 119.9 kDa

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]

**Product images:**



Circular map for MR223891