

Product datasheet for **RN217462**

Slc12a7 (NM_001013144) Rat Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Slc12a7 (NM_001013144) Rat Untagged Clone
Tag: Tag Free
Symbol: Slc12a7
Synonyms: Kcc4
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >RN217462 representing NM_001013144
Red=Cloning site **Blue**=ORF **Orange**=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCCACGAACTTTACGGTGGTGCCGGTGGAGGCGCGCCGACGGCGCCGGGACGAAGCTGCTGAGC
GCACGGAAGAACCCGGTCTCCCGAGAGCGCGGATCCTGCCTGCCCTACGCCGGGAGATGAAACCCAG
GGAGAACAGCCATTCATCAATAATGTGGAGGTGGAAAGAGAGAGCTACTTCGAGGGGAAGAACATGGCG
CTTTTTGAGGAAGAGATGGACAGCAACCCATGGTATCATCACTGCTGAACAAGCTGGCCAACTATACCA
ACCTGAGCCAGGGTGTGGTAGAGCATGAGGAAGATGAGGACAGCCGGAGGCGGGAGATCAAGGCCACG
CATGGGCACCTTCATCGGAGTCTACCTACCGTGCCTGCAGAACATCTTGGGTGTAATCCTTTTCTGCGC
CTGACCTGGATTGTGGGGCGGCTGGCCTTCTGGAGTCTTCTCATCGTGGCCATGTGCTGCACCTGTA
CAATGCTGACAGCCATCTCCATGAGTGCCATCGTACCAACGGTGTGGTCCCAGCGGGAGGCTCATACTA
CATGATCTCCCGTTCGCTGGGGCCTGAGTTTGGAGGGGCTGTTGGCCTGCTTCTACTTGGGCACAACG
TTCGACGGCCCATGTACATCTGGGAACCATCGAGATCTTCTGACCTACATCTCTCCAAGTGCAGCCA
TCTTCCAGGCAGAGACAGCAGACGCGGAGCGCCGCTGTGAACAACATGCGTGTGTATGGCAGCTG
CGCACTGGCGCTCATGGCCGTGGTGTCTTCGTCGGAGTCAAATATGTCAACAAGCTGGCCCTGGTCTTC
TTAGCCTGTGTTGTGCTTCTATCCTGGCCATCTATGCTGGTGTATCAAGACAGCCTTCGCCCCACCTG
ACATCCCGGTCTGCCTTCTAGGGAACCGCACGCTGGCGAATCGCAACTTTGATACCTGTGCCAAAATGCA
GGTTGTGACGAATGGCACAGTACCACCGCCTCTGGCGCCTTCTGCAACGGCTCCAGCTTGGGTGCC
TCTTGGATGAGTACTTTGTGCAACAATGCACTGAGATCCAGGGCATTCTGGTGTGGCCAGTGGTG
TCTTCTGGATAACCTGTGGAGCACGATTCGGACAAGGGGGCATTGTGGAAAAGAAGGGCGTGCCTC
GGTGCCTGTGTCGAGGAGAGCCGGCCTGGTGGATTGCCATATGCTCCTCACAGACATCATGACCTACTTC
ACCATGCTAGTCGGCATCTACTCCCTCCGTAACGGGGATCATGGCAGGATCCAACCGCTCCGGGGACC
TCAAAGATGCCAGAAAGTCCATCCAACAGGGACATTCTGGCCATTGTGACTACATCTTTCATTTATCT
TTCTGCAATTGTGCTGTTTGGGGCTGCATCGAGGGTGTAGTCTTGCAGATAAAGTTGGGGAGGCCCTG
CAAGGGAACCTGGTCATTGGCATGCTGGCTTGGCCATCTCCCTGGGTATCGTGATTGGCTCCTTCTTCT



```
CCACCTGTGGTGTGGCCTGCAGAGCCTAACTGGGGCACCCCGCCTGCTGCAGGCCATTGCACGCGACGG
CATCATCCCCTTCTGCAGGTGTTTGGCCATGAAAGGCCAACGGGGAGCCCACGTGGGCCTGCTGCTC
ACGGCCCTCATCTGTGAGACCGGCATCCTCATCGCCTCCCTGGACAGCGTGGCTCCCATCCTGTCCATGT
TCTTCTCATGTGCTACATGTTTCGTCACACTGGCCTGTGCTGTTTCAGACCCTGCTGCGCACACCCAACTG
GCGTCCACGTTTCAAGTTCTACCACTGGACCCTCCTTCTTGGGATGAGTCTCTGCCTTGGCCTCATG
TTCATCTGCTCCTGGTACTACGCCCTCTTCGCCATGCTCATCGCGGGCTGCATCTACAAGTACATCGAGT
ACCGAGGGGCTGAGAAGGAGTGGGGGATGGCATCAGGGGCCCTGCACTGAATGCTGCCGCTATGCCCT
GCTGCGTGTGGAACATGGGCCCCACATACCAAGAAGTGGAGGCCCCAGGTATTGGTGTGCTGAACCTG
GACTCTGAGCAGTGTGTAAGCACCCCCGCTGCTGCTTACCTCTCAGCTGAAGGCTGGCAAGGGCC
TGACCATCGTGGGATCTGTGCTGGAGGGCACCTACTTAGACAAGCATGTGGAGGCCAGCGGGCTGAGGA
GAATATCCGGTCTCTGATGAGTGCAGAGAAGATGAAAGGCTTCTGCCAGCTGGTGGTGTGCTCAACCTG
CGAGACGGTGCATCCCCTTGTCCAGTCCAGTGGCCTTGGTGGCATGAAGCACAACACTGCTCCTCATGG
CCTGGCCAGAGGCTTGAAGCAGGCAGATAACCCTTCTCCTGGAAGAAGTGTGGACTGCTCCGTGA
CACTACAGCAGCAGATCAGGCAGTGTGGTGGCAAGAAGATCGACTTGTCCCGCAGAACCAGGAGCGC
TTCAGCGACGGCAACATCGATGTGTGGTGGATCGTGCACGATGGGGGGATGCTCATGCTTCTGCCGTTCC
TGCTGCGCCAGCACAAGGTGTGGCGAAAGTGGCCGATGCGCATCTTACGGTCCGCCAGGTGGACGATAA
CAGCATCCAGATGAAGAAGGACCTGCAGATGTTCTGTACCATCTCAGGATCAGCGCCGAGGTGGAGGTG
GTAGAGATGGTTGAAAATGACATTTCTGCATTCACCTATGAGAAGACGCTAATGATGGAGCAGAGGTAC
AGATGCTGAAACAGATGCAGTTGTCAAAGAATGAGCGGGAGAGAGAGGCCAGCTGATTCACGACAGGAA
CACTGCATCCCACACCGTAGCAACGGCTAGAAGTGAAGCCCCACCAACACTGACAAAGTGCAGATGACA
TGGACGAAAGAGAAAACATTGCAGAGAAAACAGGAACAAGGACACCGGCACATCAGGCTTCAAAGACC
TTTTCAGCCTAAAGCCGGACAGTCCAACGTGAGAAGGATGCATACTGCTGTGAAGCTCAATGGTGTGGT
TCTCAACAAGTCCCAGGATGCTCAACTCGTCTGCTGAATATGCCAGGCCCCCAAAAAGTCGGCAGGGC
GACGAGAAGTACATGGAATTTCTTGGGCTTGGACCGAAGGGCTGAACAGGGTCTCCTGGTCCAGGGGTG
GTGCCGGGAAGTCATCACCATCTACTCCTAA
```

ACGCGTACGCGGCCGCTCGAGCAGAAAACATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:

Sgfl-Mlul

ACCN:

NM_001013144

Insert Size:

3252 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).

OTI Annotation:

Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.

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_001013144.2](#), [NP_001013162.2](#)

RefSeq Size: 5003 bp

RefSeq ORF: 3252 bp

Locus ID: 308069

UniProt ID: [Q5RK27](#)

Cytogenetics: 1p11

Gene Summary: Mediates electroneutral potassium-chloride cotransport when activated by cell swelling. 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 (By similarity).[UniProtKB/Swiss-Prot Function]