

Product datasheet for **MC229383**

Slc4a10 (NM_001242380) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Slc4a10 (NM_001242380) Mouse Untagged Clone
Tag: Tag Free
Symbol: Slc4a10
Synonyms: mKIAA4136; NCBE
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC229383 representing NM_001242380
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGAGATTAAGACCAGGGAGCCCAAATGGAGCCGCTGCTGCCTACGAGAAATGATGAAGAAGCCGTTG
 TGGATAGAGGTGGAACACGCTCTATTCTCAAACACATTTTGAGAAAGAAGATTTAGAAGTCATCGGAC
 ATTATTTATTGGAGTTCATGTGCCCTGGGTGGAAGAAAAGCCATCGTCGTACAGGCATCGTGGTCAT
 AAGCACAGAAAGAGGGACAGAGAGAGATTCCGGACTGGAGGATGGAAGAGAGTCCCCTCTTTTGACA
 CCCCATCGCAGAGGGTGCAGTTTATTCTTGAAGTGAAGGACGATGATGAGGAGCACCTCCCTCATGACCT
 TTTCACAGAGCTGGATGAGATTTGCTGGCGTGAAGGGGAAGATGCTGAGTGGCGAGAGACAGCCAGGTGG
 TTGAAATTTGAAGAGGATGTGGAAGATGGAGGAGAAAGATGGAGTAAGCCCTATGTGGCCACGCTTTCAT
 TACACAGCTTGTTTGAGTTGAGAAGCTGCATCCTGAATGGAAGTGTGCTACTGGACATGCATGCCAACAC
 GATAGAAGAAATGCAGATATGGTCCTTGACCAGCAGGTCAGCTCAGGCCAGCTGAATGAAGATGTTCCG
 CACAGGGTCCACGAAGCATTGATGAAGCAGCATCATCACCAGAATCAGAAAAAATGGCTAACAGGATTC
 CTATTGTCCGATCTTTTGCTGATATTGGCAAGAAACAATCAGAACCAAATTCATGGATAAAAAATGCAGC
 TCAGGTTGTTTCTCCTCAGTCTGCTCCAGCCTGTGCTGAGAATAAAAAATGATGTCAGCAGGGAAAAACAGC
 ACTGTAGACTTCAGCAAGGGACTGGGAGCCAAACAAAAGGGGCATACTAGTCCATGTGGGATGAAACAAA
 GGCTTGACAAAGGACCTCCACACCAGCAGGAGAGAGAGTTGATCTGCATTTTATGAAAAAGATTCTCC
 GGGTGCTGAAGCTTCAAACATCTTGGTAGGAGAACTGGAGTTCCTAGACAGAACTGTGGTTGCCCTTGTG
 AGGTTGTCTCCAGCTGTCTTCTCAAGGACTTGCTGAAGTTCCAATCCAAGCAGATTTCTGTTTCATCC
 TTCTGGGACCCCTGGGAAAGGTCAACAGTACCACGAGATTGGCAGATCGATTGCGACCTTAATGACTGA
 TGAGGTGTTTCATGATGTTGCTTACAAAGCTAAAGACCGCAATGACTTGGTATCAGGAATTGATGAGTTT
 CTGGATCAGGTTACCGTTCTTCTCCTGGAGAATGGGATCCAAGCATAACGAATAGAACCTCCAAAAATG
 TCCTTCCAGGAGAAGAGGAAGATTCTGCTGTACCAAATGGAACAGCAGCTCATGGCGAAGCTGAGCC
 ACATGGAGGACACAGCGGACCTGAACTCCAGCGAACTGGGAGGATTTTGGGGGACTTATATTAGATATC
 AAAAGAAAGGCTCCATTCTTCTGGAGTGACTTCAGGGATGCTTTCAGCCTGCAGTGCTTAGCATCGTTCC



TGTTTCTCTACTGTGCATGCATGTCCTCCTGTCATCACATTTGGAGGACTGTTGGGAGAAGCAACTGAAGG
 TCGTATAAGTGAATCGAATCACTCTTTGGAGCATCTATGACCGGGATAGCCTATTCTCTTTTTGGTGG
 CAGCCCCGACCATATTAGGCAGCACAGGACCTGTTTTGGTGTTTAAAAAGATCTTGTTAAAGTTTTGCA
 AGGAATACGGCCTGTCGTACTTGTCTTACGGGCCAGCATTGGGCTCTGGACTGCAACACTGTGCATCAT
 CCTTGTGGCCACGGACGGAGCTCACTCGTCTGCTACATCACCCGGTTTACCGAAGAGGCTTTTGCTTCT
 CTCATTTGCATCATTTTTATCTATGAAGCCCTGGAGAAGTTGTTGAGCTCAGTAAAACCTATCCAATCA
 ATATGCACAATGATTTGGAAGTCTGACACAATACTCATGTAAGTGTATGGAGCCACATAGTCCAGCAA
 TGACACACTGAAGGAATGGCGGGAGTCCAACCTTTCTGCCTCTGACATAATCTGGGGAACTAACTGTG
 TCAGAGTGCAGATCACTGCACGGGGAGTATGTCGGGCGAGCCTGTGGCCATGGCCACCCCTACGTGCCAG
 ATGTTCTCTTCTGGTGGTATCCTGTTCTTCTCCACAGTTACCATGTCAGCCACCCTGAAGCAGTTCAA
 GACCAGCCGCTATTTCCCAACCAAGTTTCGATCCATAGTGAGTGATTTTGGCGTTTTTCTTACAATTCTG
 TGTATGGTTTTAATTGACTATGCCATTGGGATCCCATCACAAAACCTACAAGTACCAAGCGTTTTCAAGC
 CGACCAGAGACGACCGTGGTGGTTTGTACACCTTTGGGTCAAACCCATGGTGGACAATCATAGCTGC
 CATCATCCAGCTTTACTCTGTACTATTCTGATTTTCATGGACCAGCAGATTACAGCTGTCATCATCAAC
 AGAAAAGAGCACAAAGCTAAAGAAAGTTGTGGCTATCACCTGGATCTGTTAATGGTGGCAGTCATGCTCG
 GGGTCTGCTCCATTATGGGCCTGCCATGGTTTGTGGCTGCCACAGTTCTCTCCATCACTCATGTCAACAG
 CCTCAAGCTCGAATCAGAGTGTCTGCTCCAGGAGAACAACCCAAGTTTCTCGGCATTGGGAGCAGAGG
 GTGACCGGGCTCATGATTTTTATTCTTATGGGTTTCATCCGTTTTTCATGACCAGCATTCTGAAGTTTATCC
 CCATGCCAGTGTATACGGAGTGTCTTTTATATGGGTGCTTCGTCTCTCAAAGGAATTCAGTTATTTGA
 TAGAATAAAGCTCTTCTGGATGCCAGCCAAACATCAACCAGATTTTCATCTATCTAAGGCACGTGCCCTC
 CGGAAAGTCCATCTTTCACAGTCATTCAGATGAGTTGTCTCGGCCTTCTGTGGATAATCAAAGTTTGA
 GAGCTGCTATTGTCTTCTATGATGGTGTGGCACTAGTGTGTTGAGAAAAGTTGATGGACTTCTTGT
 TACCAAACGGGAACTCAGCTGGCTTGTGATTTAATGCCTGAGAGTAAAAAGAAGAACTTGAAGATGCT
 GAGAAAGAAGAAGAAACAAGTATGCTAGCCATGGAGGACGAGGGCACAGTACAACCTCCCACTGGAGGGAC
 ACTACAGAGACGACCCGCTGTGATCAATATTTCTGATGAAATGTCAAAGACTGCCATGTGGGGAACTT
 CTAGTTACTGCTGACAACCTCAAAGAAAAGGAGTCACGCTTTCCTTCTAAAAGCTCCCCTTCTAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM_001242380
- Insert Size:** 3357 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_001242380.1](#), [NP_001229309.1](#)

RefSeq Size: 5553 bp

RefSeq ORF: 3357 bp

Locus ID: 94229

UniProt ID: [Q5DTL9](#)

Cytogenetics: 2 C1.3

Gene Summary: Sodium/bicarbonate cotransporter which plays an important role in regulating intracellular pH (PubMed:10993873, PubMed:20566632). Has been shown to act as a sodium/bicarbonate cotransporter in exchange for intracellular chloride (PubMed:10993873, PubMed:20566632). Has also been shown to act as a sodium/bicarbonate cotransporter which is not responsible for net efflux of chloride, with the observed chloride efflux being due to chloride self-exchange (By similarity). Controls neuronal pH and may contribute to the secretion of cerebrospinal fluid (PubMed:18165320). Reduces the excitability of CA1 pyramidal neurons and modulates short-term synaptic plasticity (PubMed:26136660). Required in retinal cells to maintain normal pH which is necessary for normal vision (PubMed:23056253). In the kidney, likely to mediate bicarbonate reclamation in the apical membrane of the proximal tubules (By similarity).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (4) differs in the 3' UTR and coding sequence compared to variant 1. The resulting isoform (4) has a shorter and distinct C-terminus compared to isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.