

Product datasheet for **MC229353**

Slc4a10 (NM_001242381) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Slc4a10 (NM_001242381) 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: >MC229353 representing NM_001242381
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGATTAAGACCAGGGAGCCAAATGGAGCCGCTGCTGCCTACGAGAAATGATGAAGAAGCCGTTG
TGGATAGAGGTGGAACACGCTCTATTCTCAAACACATTTTGAGAAAGAAGATTTAGAAGTCATCGGAC
ATTATTTATTGGAGTTCATGTGCCCTGGGTGGAAGAAAAGCCATCGTCGTACAGGCATCGTGGTCAT
AAGCACAGAAAGAGGGACAGAGAGAGAGATTCCGGACTGGAGGATGGAAGAGAGTCCCCTCTTTTGACA
CCCCATCGCAGAGGGTGCAGTTTATTCTTGAAGTGGAGACGATGATGAGGAGCACCTCCCTCATGACCT
TTTCACAGAGCTGGATGAGATTTGCTGGCGTGAAGGGGAAGATGCTGAGTGGCGAGAGACAGCCAGGTGG
TTGAAATTTGAAGAGGATGTGGAAGATGGAGGAGAAAGATGGAGTAAGCCCTATGTGGCCACGCTTTCAT
TACACAGCTTGTGGAGTTGAGAAGCTGCATCCTGAATGGAAGTGTCTACTGGACATGCATGCCAACAC
GATAGAAGAAATTCAGATATGGTCCTTGACCAGCAGGTGAGTCCAGGCCAGTGAATGAAGATGTTCCG
CACAGGGTCCACGAAGCATTGATGAAGCAGCATCATCACCAGAATCAGAAAAAATGGCTAACAGGATTC
CTATTGTCCGATCTTTGCTGATATTGGCAAGAAACAATCAGAACCAAATTCATGGATAAAAAATGGTCA
GGTTGTTTCTCCTCAGTCTGCTCCAGCCTGTGCTGAGAATAAAAAATGATGTCAGCAGGGAACAGCACT
GTAGACTTCAGCAAGGTTGATCTGCATTTTATGAAAAAGATTCCTCCGGGTGCTGAAGCTTCAAACATCT
TGGTAGGAGAAGTGGAGTTCCTAGACAGAACTGTGGTTGCCTTTGTCAGGTTGTCTCCAGCTGTCTTGCT
CCAAGGACTTGCTGAAGTTCCAATCCCAAGCAGATTTCTGTTTATCCTTCTGGGACCCCTGGGAAAGGGT
CAACAGTACCACGAGATTGGCAGATCGATTGCGACCTTAATGACTGATGAGGTGTTTCATGATGTTGCTT
ACAAAGCTAAAGACCGCAATGACTTGGTATCAGGAATTGATGAGTTTCTGGATCAGGTTACCGTTCTTCC
TCCTGGAGAATGGGATCCAAGCATACGAATAGAACCCTCCAAAAATGTCCCTTCCAGGAGAAGAGGAAG
ATTCCTGTGTACCAAATGGAACAGCAGCTCATGGCGAAGCTGAGCCACATGGAGGACACAGCGGACCTG
AACTCCAGCGAACTGGGAGGATTTTGGGGGACTTATATTAGATATCAAAGAAAAGGCTCCATTCTCTG
GAGTGACTTCAGGGATGCTTTCAGCCTGCAAGTCTTAGCATCGTTCTGTTTCTACTGTGCATGCATG
TCTCCTGTATCATATTTGGAGGACTGTTGGGAGAAGCAACTGAAGGTCGTATAAGTGAATCGAATCAC



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TCTTTGGAGCATCTATGACCGGGATAGCCTATTCTCTTTTTGGTGGACAGCCCCTGACCATATTAGGCAG
CACAGGACCTGTTTTGGTGTGTTGAAAAGATCTTGTTTAAGTTTTGCAAGGAATACGGCCTGTCGTA
TCCTTACGGGCCAGCATTGGGCTCTGGACTGCAACACTGTGCATCATCCTTGTGGCCACGGACGCGAGCT
CACTCGTCTGCTACATCACCCGGTTTACCGAAGAGGCTTTTGCTTCTCATTGTCATTTTTATCTA
TGAAGCCCTGGAGAAGTTGTTTGGAGTCACTGAAACCTATCCAATCAATATGCACAATGATTTGAACTG
CTGACACAATACTCATGTAAGTGTATGGAGCCACATAGTCCAGCAATGACACACTGAAGGAATGGCGGG
AGTCCAACCTTTCTGCCTCTGACATAACTGCGGGGAACCTAACTGTGTCAGAGTGCAGATCACTGCACGG
GGAGTATGTCGGGCGAGCCTGTGGCCATGGCCACCCCTACGTGCCAGATGTTCTTCTGTCGGTGATC
CTGTTCTTCTCCACAGTTACCATGTCAGCCACCCTGAAGCAGTTCAAGACCAGCCGCTATTTCCCAACCA
AGGTTTCGATCCATAGTGAGTGATTTTGGGTTTTTCTTACAATTCTGTGTATGGTTTTAATTGACTATGC
CATTGGGATCCCATCACAAAACACAAGTACCAAGCGTTTTCAAGCCGACCAGAGACGACCGTGGCTGG
TTTGTACACCTTTGGTCCAACCCATGGTGGACAATCATAGCTGCCATCATCCAGCTTTACTCTGTA
CTATTCTGATTTTTCATGGACCAGCAGATTACAGCTGTCATCATCAACAGAAAAGAGCACAAGCTAAAGAA
AGGTTGTGGCTATCACCTGGATCTGTTAATGGTGGCAGTCATGCTCGGGTCTGCTCCATTATGGCCCTG
CCATGGTTTGTGGCTGCCACAGTTCTCTCCATCACTCATGTCAACAGCCCTCAAGCTCGAATCAGAGTGCT
CTGCTCCAGGAGAAACCCAAGTTTCTCGGCATTGCGGAGCAGAGGGTGACCGGCTCATGATTTTTAT
TCTTATGGGTTTATCCGTTTTATGACCAGCATTCTGAAGTTTATCCCATGCCAGTGTTATACGGAGTG
TTTCTTTATATGGGTGCTTCGTCTCTCAAAGGAATTCAGTTATTTGATAGAATAAAGCTCTTCTGGATGC
CAGCCAAACATCAACCAGATTTTCTATCTAAGGCACGTGCCCTCCGGAAAGTCCATCTTTCACAGT
CATTGAGATGAGTTGCTCGGCCTTCTGTGGATAATCAAAGTTTCGAGAGCTGCTATTGTCTTTCATG
ATGGTGTGGCACTAGTGTGTTGTGAGAAAGTTGATGGACTTCTTGTGTTACCAAACGGGAACCTCAGCTGC
TTGATGATTTAATGCCTGAGAGTAAAAAGAAGAACTTGAAGATGCTGAGAAAGAAGAAGAACTAAGTAT
GCTAGCCATGGAGACGAGGGCACAGTACAACCTCCACTGGAGGGACACTACAGAGACGACCCGTCTGTG
ATCAATATTTCTGATGAAATGTCAAAGACTGCCATGTGGGGGAACCTTCTAGTTACTGCTGACAACCTCAA
AAGAAAAGGAGTCACGCTTCTCTAAAAGCTCCCTTCC^{TA}A

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM_001242381
- Insert Size:** 3264 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_001242381.1](#), [NP_001229310.1](#)

RefSeq Size: 5460 bp

RefSeq ORF: 3264 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 (5) uses an alternate in-frame splice junction at the 5' end of an exon, lacks an alternate in-frame exon, and differs in the 3' UTR and coding sequence compared to variant 1. The resulting isoform (5) lacks two alternate internal segments and 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.