

## Product datasheet for **MC229373**

### Slc4a10 (NM\_001242383) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Slc4a10 (NM\_001242383) 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:** >MC229373 representing NM\_001242383  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGAGATTAAGACCAGGGAGCCAAATGGAGCCGCTGCTGCCTACGAGAAATGATGAAGAAGCCGTTG  
 TGGATAGAGGTGGAACACGCTCTATTCTCAAACACATTTTGAGAAAGAAGATTTAGAAGGTCATCGGAC  
 ATTATTTATTGGAGTTCATGTGCCCTGGGTGGAAGAAAAGCCATCGTCGTACAGGCATCGTGGTCAT  
 AAGCACAGAAAGAGGGACAGAGAGAGAGATTCCGGACTGGAGGATGGAAGAGAGTCCCCTCTTTTGACA  
 CCCCATCGCAGAGGGTGCAGTTTATTCTTGAAGTGGAGACGATGATGAGGAGCACCTCCCTCATGACCT  
 TTTCACAGAGCTGGATGAGATTTGCTGGCGTGAAGGGGAAGATGCTGAGTGGCGAGAGACAGCCAGGTGG  
 TTGAAATTTGAAGAGGATGTGGAAGATGGAGGAGAAAGATGGAGTAAGCCCTATGTGGCCACGCTTTCAT  
 TACACAGCTTGTGGAGTTGAGAAGCTGCATCCTGAATGGAAGTGTGCTACTGGACATGCATGCCAACAC  
 GATAGAAGAAATTCAGATATGGTCCTTGACCAGCAGGTCAGCTCAGGCCAGTGAATGAAGATGTTCCG  
 CACAGGGTCCACGAAGCATTGATGAAGCAGCATCATACCAGAATCAGAAAAAATGGCTAACAGGATTC  
 CTATTGTCCGATCTTTGCTGATATTGGCAAGAAACAATCAGAACCAAATTCATGGATAAAAAATGGTCA  
 GGTTGTTTCTCCTCAGTCTGCTCCAGCCTGTGCTGAGAATAAAAAATGATGTCAGCAGGGAACAGCACT  
 GTAGACTTCAGCAAGGTTGATCTGCATTTTATGAAAAAGATTCCTCCGGGTGCTGAAGCTTCAAACATCT  
 TGGTAGGAGAAGTGGAGTTCCTAGACAGAACTGTGGTTGCCTTTGTCAGGTTGTCTCCAGCTGTCTTGCT  
 CCAAGGACTTGCTGAAGTTCCAATCCCAAGCAGATTTCTGTTTCATCCTTCTGGGACCCCTGGGAAAGGT  
 CAACAGTACCACGAGATTGGCAGATCGATTGCGACCTTAATGACTGATGAGGTGTTTCATGATGTTGCTT  
 ACAAGCTAAAGACCGCAATGACTTGGTATCAGGAATTGATGAGTTTCTGGATCAGGTTACCGTTCTTCC  
 TCCTGGAGAATGGGATCCAAGCATACGAATAGAACCTCCCAAAAATGTCCCTTCCAGGAGAAGAGGAAG  
 ATTCCTGTGTACCAAATGGAACAGCAGCTCATGGCGAAGCTGAGCCACATGGAGGACACAGCGGACCTG  
 AACTCCAGCGAACTGGGAGGATTTTGGGGACTTATATTAGATATCAAAGAAAAGGCTCCATTCTCTG  
 GAGTGACTTCAGGGATGCTTTCAGCCTGCAGTGTAGCATCGTTCTGTTTCTACTGTGCATGCATG  
 TCTCCTGTATCATATTTGGAGGACTGTTGGGAGAAGCAACTGAAGGTCGTATAAGTGAATCGAATCAC



TCTTTGGAGCATCTATGACCGGGATAGCCTATTCTCTTTTTGGTGGACAGCCCCTGACCATATTAGGCAG  
CACAGGACCTGTTTTGGTGTGGTAAAGATCTTGTAAAGTTTTGCAAGGAATACGGCCTGTCGTA  
TCCTTACGGGCCAGCATTGGGCTCTGGACTGCAACACTGTGCATCATCTTGTGGCCACGGACGCGAGCT  
CACTCGTCTGCTACATCACCCGGTTTACCGAAGAGGCTTTTGCTTCTCATTGGCATATTTTTATCTA  
TGAAGCCCTGGAGAAGTTGTTTGGAGTCACTGAAACCTATCCAATCAATATGCACAATGATTTGGAAGT  
CTGACACAATACTCATGTAAGTGTATGGAGCCACATAGTCCAGCAATGACACACTGAAGGAATGGCGGG  
AGTCCAACCTTTCTGCCTGACATAATCTGGGGGAACCTAAGTGTGTGAGAGTGCAGACTGCACGG  
GGAGTATGTCGGGCGAGCCTGTGGCCATGGCCACCCCTACGTGCCAGATGTTCTCTTCTGGTGGTATC  
CTGTTCTTCTCCACAGTTACCATGTGAGCCACCCTGAAGCAGTTCAAGACCAGCCGCTATTTCCCAACCA  
AGGTTTCGATCCATAGTGAGTGATTTTGGGTTTTTCTTACAATTCTGTGTATGGTTTTAATTGACTATGC  
CATTGGGATCCCATACCAAAACTACAAGTACCAAGCGTTTTCAAGCCGACCAGAGACGACCGTGGCTGG  
TTTGTACACCTTTGGTCCAACCCATGGTGGACAATCATAGCTGCCATCATCCAGCTTTACTCTGTA  
CTATTCTGATTTTTCATGGACCAGCAGATTACAGCTGTGCATCAACAGAAAAGAGCACAAGCTAAAGAA  
AGGTTGTGGCTATCACCTGGATCTGTTAATGGTGGCAGTATGCTCGGGTCTGCTCCATTATGGCCCTG  
CCATGGTTTGTGGCTGCCACAGTTCTCTCCATCACTCATGTCAACAGCCCTCAAGCTCGAATCAGAGTGT  
CTGCTCCAGGAGAAACCCAAGTTTCTCGGCATTCCGGGAGCAGAGGGTGACCGGCTCATGATTTTAT  
TCTTATGGGTTTATCCGTTTTATGACCAGCATTCTGAAGTTTATCCCATGCCAGTGTTATACGGAGTG  
TTTCTTTATATGGGTGCTTCGTCTCTCAAAGGAATTCAGTTATTTGATAGAATAAAGCTCTTCTGGATGC  
CAGCCAAACATCAACCAGATTTTCTATCTAAGGCACGTGCCCTCCGGAAAGTCCATCTTTCACAGT  
CATTGAGATGAGTTGCTCGGCCTTCTGTGGATAATCAAAGTTTCGAGAGCTGCTATTGTCTTTCATG  
ATGGTGTGGCACTAGTGTGTGAGAAAGTTGATGGACTTCTTGTTTACCAAACGGGAAGTCAAGTATG  
TTGATGATTTAATGCCTGAGAGTAAAAAGAAGAACTTGAAGATGCTGAGAAAGAAGAAGAAAGTAT  
GCTAGCCATGGAGGACGAGGGCACAGTACAACCTCCACTGGAGGGACACTACAGAGACGACCCGCTGTG  
ATCAATATTTCTGATGAAATGTCAAAGACTGCCATGTGGGGGAACCTTCTAGTTACTGCTGACAACCAA  
AAGAAAAGGAGTACGCTTTCCTTCTAAAAGCAATGAAAGCCGAAAGGAGAAAGGAGTACTCAGGGAA  
AGGCGTTGACAGGGAGACTTGTCTATGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** Sgfl-Mlul
- ACCN:** NM\_001242383
- Insert Size:** 3318 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\\_001242383.1](#), [NP\\_001229312.1](#)

**RefSeq Size:** 5421 bp

**RefSeq ORF:** 3318 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 (7) uses an alternate in-frame splice junction at the 5' end of an exon and lacks an alternate in-frame exon compared to variant 1. The resulting isoform (7) lacks two alternate internal segments 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.