

Product datasheet for **MC229402**

Slc4a10 (NM_001242382) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Slc4a10 (NM_001242382) 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: >MC229402 representing NM_001242382
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGAGATTAAGACCAGGGAGCCCAAATGGAGCCGCTGCTGCCTACGAGAAATGATGAAGAAGCCGTTG
 TGGATAGAGGTGGAACACGCTCTATTCTCAAACACATTTTGAGAAAGAAGATTTAGAAGGTCATCGGAC
 ATTATTTATTGGAGTTCATGTGCCCTGGGTGGAAGAAAAGCCATCGTCGTACAGGCATCGTGGTCAT
 AAGCACAGAAAGAGGGACAGAGAGAGAGATTCCGGACTGGAGGATGGAAGAGAGTCCCCTCTTTTGACA
 CCCCATCGCAGAGGGTGCAGTTTATTCTTGGAACTGAGGACGATGATGAGGAGCACCTCCCTCATGACCT
 TTTCACAGAGCTGGATGAGATTTGCTGGCGTGAAGGGGAAGATGCTGAGTGGCGAGAGACAGCCAGGTGG
 TTGAAATTTGAAGAGGATGTGGAAGATGGAGGAGAAAGATGGAGTAAGCCCTATGTGGCCACGCTTTCAT
 TACACAGCTTGTTTGAGTTGAGAAGCTGCATCCTGAATGGAAGTGTGCTACTGGACATGCATGCCAACAC
 GATAGAAGAAATTCAGATATGGTCCTTGACCAGCAGGTGAGTCCAGGCCAGTGAATGAAGATGTTCCG
 CACAGGGTCCACGAAGCATTGATGAAGCAGCATCATCACCAGAATCAGAAAAAATGGCTAACAGGATTC
 CTATTGTCCGATCTTTGCTGATATTGGCAAGAAACAATCAGAACCAAATCCATGGATAAAAAATGGTCA
 GGTTGTTTCTCCTCAGTCTGCTCCAGCCTGTGCTGAGAATAAAAAATGATGTCAGCAGGGAAAAACAGCACT
 GTAGACTTCAGCAAGGGACTGGGAGGCCAACAAAAGGGGCATACTAGTCCATGTGGGATGAAACAAAGGC
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 TGCTGAAGCTTCAAACATCTTGGTAGGAGAAGTGGAGTTCCTAGACAGAAGTGGTTGCCTTTGTCAGG
 TTGTCTCCAGCTGCTTCTCAAGGACTTGTGAAGTCCAATCCCAAGCAGATTTCTGTTTCATCTTTC
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 GGTGTTTCATGATGTTGCTTACAAAGCTAAAGACCGCAATGACTTGGTATCAGGAATTGATGAGTTTCTG
 GATCAGGTTACCGTTCTCCTCCTGGAGAATGGGATCCAAGCATACGAATAGAACCTCCCAAAAAATGTC
 CTTCCCAGGAGAAGGAAGATTCTGTGTACCAAAATGGAACAGCAGCTCATGGCGAAGCTGAGCCACA
 TGGAGGACACAGCGGACCTGAACTCCAGCGAACTGGGAGGATTTTGGGGGACTTATATTAGATATCAAA
 AGAAAGGCTCCATTCTTCTGGAGTGACTTCAGGGATGCTTTCAGCCTGCAGTGCTTAGCATCGTTCTCTGT



TTCTCTACTGTGCATGCATGTCTCCTGTGCATCACATTTGGAGGACTGTTGGGAGAAGCAACTGAAGGTCG
TATAAGTGCAATCGAATCACTCTTTGGAGCATCTATGACCGGGATAGCCTATTCTCTTTTTGGTGGACAG
CCCCTGACCATATTAGGCAGCACAGGACCTGTTTTGGTGTGGAAAAGATCTTGTTAAGTTTTGCAAGG
AATACGGCCTGTCGTAATGTCTTACGGGCCAGCATTGGGCTCTGGACTGCAACACTGTGCATCATCT
TGTGGCCACGGACGCGAGCTCACTCGTCTGCTACATCACCCGGTTTACCGAAGAGGCTTTTGCTTCTCTC
ATTTGCATCATTTTTATCTATGAAGCCCTGGAGAAGTTGTTGAGCTCAGTGAACCTATCCAATCAATA
TGCACAATGATTTGGAAGTGTGACACAATACTCATGTAAGTGTATGGAGCCACATAGTCCAGCAATGA
CACACTGAAGGAATGGCGGGAGTCCAACCTTTCTGCCTCTGACATAATCTGGGGAACTAACTGTGTCA
GAGTGCAGATCACTGCACGGGGAGTATGTGGGGAGCCTGTGGCCATGGCCACCCTACGTGCCAGATG
TTCTCTTCTGGTCGGTGATCCTGTTCTTCTCCACAGTTACCATGTGAGCCACCCTGAAGCAGTTCAAGAC
CAGCCGCTATTTCCCAACCAAGGTTTCGATCCATAGTGAGTGATTTTGGGTTTTTCTTACAATTCTGTGT
ATGTTTTAATTGACTATGCCATTGGGATCCCACACAAAACACAAGTACCAAGCGTTTTCAAGCCGA
CCAGAGACGACCGTGGCTGGTTTGTACACCTTTGGGTCAAACCCATGGTGGACAATCATAGTCCAT
CATCCCAGCTTTACTCTGTACTATTCTGATTTTTCATGGACCAGCAGATTACAGCTGTGCATCAACAGA
AAAGAGCACAAAGCTAAAGAAAGGTTGTGGCTATCACCTGGATCTGTTAATGGTGGCAGTCATGCTCGGG
TCTGCTCCATTATGGGCCTGCCATGGTTTGTGGCTGCCACAGTTCTCCATCACTCATGTCAACAGCCT
CAAGCTCGAATCAGAGTCTCTGCTCCAGGAGAACAACCAAGTTTCTCGGCATTCGGGAGCAGAGGGTG
ACCGGGCTCATGATTTTTATTCTTATGGGTTTCCGTTTTTCATGACCAGCATTCTGAAGTTTATCCCA
TGCCAGTGTTATACGGAGTGTCTTTATATGGGTGCTTCGTCTCTCAAAGGAATTCAGTTATTTGATAG
AATAAAGCTCTTCTGGATGCCAGCCAAACATCAACCAGATTTTCATCTATCAAGGCAGTGCCTCCCG
AAAGTCCATCTTTCACAGTCATTCAGATGAGTTGTCTCGGCCTTCTGTGGATAATCAAAGTTTCGAGAG
CTGCTATTGTCTTCTATGATGGTGTGGCACTAGTGTGTGAGAAAGTTGATGGACTCTTGTTTTAC
CAAACGGGAACCTCAGCTGGCTTGTGATGATTTAATGCCTGAGAGTAAAAGAAGAACTTGAAGATGCTGAG
AAAGAAGAAGAACAAGTATGCTAGCCATGGAGGACGAGGGCACAGTACAACCTCCACTGGAGGGCACT
ACAGAGACGACCGTCTGTGATCAATTTTCTGATGAAATGTCAAAGACTGCCATGTGGGGAACTTCT
AGTTACTGCTGACAACCTCAAAGAAAAGGAGTACGCTTTCTTCTAAAAGCAATGAAAGCCGAAAGGAG
AAGAAAGCTGACTCAGGGAAAGGCGTTGACAGGGAGACTGTCTA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** Sgfl-Mlul
- ACCN:** NM_001242382
- Insert Size:** 3408 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_001242382.1, NP_001229311.1

RefSeq Size: 5511 bp

RefSeq ORF: 3408 bp

Locus ID: 94229

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 (6) uses an alternate in-frame splice junction at the 5' end of an exon compared to variant 1. The resulting isoform (6) lacks a single internal aa 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.