

Product datasheet for MC229374

Slc4a10 (NM_001242379) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Slc4a10 (NM_001242379) 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: >MC229374 representing NM_001242379
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGAGATTAAGACCAGGGAGCCAAATGGAGCCGCTGCTGCCTACGAGAAATGATGAAGAAGCCGTTG
 TGGATAGAGGTGGAACACGCTCTATTCTCAAACACATTTTGAGAAAGAAGATTTAGAAGGTCATCGGAC
 ATTATTTATTGGAGTTCATGTGCCCTGGGTGGAAGAAAAGCCATCGTCGTACAGGCATCGTGGTCAT
 AAGCACAGAAAGAGGGACAGAGAGAGAGATTCCGGACTGGAGGATGGAAGAGAGTCCCCTCTTTTGACA
 CCCCATCGCAGAGGGTGCAGTTTATTCTTGAAGTGAAGGACGATGATGAGGAGCACCTCCCTCATGACCT
 TTTCACAGAGCTGGATGAGATTTGCTGGCGTGAAGGGGAAGATGCTGAGTGGCGAGAGACAGCCAGGTGG
 TTGAAATTTGAAGAGGATGTGGAAGATGGAGGAGAAAGATGGAGTAAGCCCTATGTGGCCACGCTTTCAT
 TACACAGCTTGTGGAGTTGAGAAGCTGCATCCTGAATGGAAGTGTGCTACTGGACATGCATGCCAACAC
 GATAGAAGAAATGCAGATATGGTCCTTGACCAGCAGGTCAGCTCAGGCCAGTGAATGAAGATGTTCCG
 CACAGGGTCCACGAAGCATTGATGAAGCAGCATCATCACCAGAATCAGAAAAAAGTGGCTAACAGGATTC
 CTATTGTCCGATCTTTGCTGATATTGGCAAGAAACAATCAGAACCAATTCATGGATAAAAAAGCAGC
 TCAGGTTGTTCTCCTCAGTCTGCTCCAGCCTGTGCTGAGAATAAAAATGATGTCAGCAGGGAAAAACAGC
 ACTGTAGACTTCAGCAAGTTGATCTGCATTTTATGAAAAAGATTCTCCGGGTGCTGAAGCTTCAAACA
 TCTTGGTAGGAGAACTGGAGTTCCTAGACAGAAGTGTGGTTGCCTTTGTCAGGTTGTCTCCAGCTGTCTT
 GCTCCAAGGACTTGTGAAGTTCGAATCCCAAGCAGATTTCTGTTTCATCCTTCTGGGACCCCTGGGAAAG
 GGTCAACAGTACCACGAGATTGGCAGATCGATTGCGACCTTAATGACTGATGAGGTGTTTCATGATGTTG
 CTTACAAAGCTAAAGACCGCAATGACTTGGTATCAGGAATTGATGAGTTTCTGGATCAGGTTACCGTTCT
 TCCTCCTGGAGAATGGGATCCAAGCATAACGAATAGAACCTCCCAAAAATGTCCTTCCCAGGAGAAGAGG
 AAGATTCTGCTGTACCAATGGAACAGCAGCTCATGGCGAAGCTGAGCCACATGGAGGACACAGCGGAC
 CTGAACTCCAGCGAACTGGGAGGATTTTGGGGGACTTATATTAGATATCAAAGAAAGGCTCCATTCTT
 CTGGAGTGACTTCAGGGATGCTTTCAGCCTGCAGTGTAGCATCGTTTCTGTTTCTACTGTGCATGC
 ATGTCTCCTGTATCACATTTGGAGGACTGTTGGGAGAAGCAACTGAAGTTCGTATAAGTGAATCGAAT



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CACTCTTTGGAGCATCTATGACCGGGATAGCCTATTCTCTTTTTGGTGGACAGCCCCTGACCATATTAGG
 CAGCACAGGACCTGTTTTGGTGTGTTGAAAAGATCTTGTTAAGTTTTGCAAGGAATACGGCCTGTCGTAC
 TTGTCCTTACGGGCCAGCATTGGGCTCTGGACTGCAACACTGTGCATCATCCTTGTGGCCACGGACGCGA
 GCTCACTCGTCTGCTACATCACCCGGTTTACCGAAGAGGCTTTTGCTTCTCTCATTTGCATCATTTTTAT
 CTATGAAGCCCTGGAGAAGTTGTTTGAGCTCAGTGAAACCTATCCAATCAATATGCACAATGATTTGGAA
 CTGCTGACACAATACTCATGTAAGTGTATGGAGCCACATAGTCCCAGCAATGACACACTGAAGGAATGGC
 GGGAGTCCAACCTTTCTGCCTCTGACATAATCTGGGGAACTAACTGTGTCAGAGTGCAGATCACTGCA
 CGGGGAGTATGTCGGGCCAGCCTGTGGCCATGGCCACCCCTACGTGCCAGATGTTCTCTTCTGGTCGGTG
 ATCCTGTTCTTCTCCACAGTTACCATGTGAGCCACCCTGAAGCAGTTCAAGACCAGCCGCTATTTCCCAA
 CCAAGGTCGATCCATAGTGAGTGATTTTGCGGTTTTTCTTACAATTCTGTGTATGGTTTTAATTGACTA
 TGCCATTGGGATCCCATCACAAAACACTACAAGTACCAAGCGTTTTCAAGCCGACCAGAGACGACCGTGGC
 TGGTTTTGTACACCTTTGGGTCCAAACCCATGGTGGACAATCATAGCTGCCATCATCCCAGCTTTACTCT
 GTACTATTCTGATTTTCATGGACCAGCAGATTACAGCTGCATCATCAACAGAAAAGAGCACAAGCTAAA
 GAAAGGTTGTGGCTATCACCTGGATCTGTTAATGGTGGCAGTCATGCTCGGGGTCTGCTCCATTATGGC
 CTGCCATGGTTTTGTGGTCCACAGTTCTCTCCATCACTCATGTCAACAGCCTCAAGCTCGAATCAGAGT
 GCTCTGCTCCAGGAGAACAACCCAAGTTTCTCGGCATTCCGGAGCAGAGGGTGACCGGGCTCATGATTTT
 TATTCTTATGGGTTTCATCCGTTTTTCATGACCAGCATTCTGAAGTTTATCCCCATGCCAGTGTATACGGA
 GTGTTTCTTTATATGGGTGCTTCGTCTCTCAAAGGAATTCAGTTATTTGATAGAATAAAGCTCTTCTGGA
 TGCCAGCCAAACATCAACCAGATTTTCATCTATCTAAGGCACGTGCCCTCCGGAAAGTCCATCTCTTAC
 AGTCATTAGAGTGGTCTCGGCCTTCTGTGGATAATCAAAGTTTCGAGAGCTGCTATTGTCTTTCTCT
 ATGATGGTGTGGCACTAGTGTGTTGTGAGAAAGTTGATGGACTTCTTGTTTACCAAACGGGAACCTCAGT
 GGCTTGATGATTTAATGCCTGAGAGTAAAAGAAGAACTTGAAGATGCTGAGAAAGAAGAACAAG
 TATGCTAGCCATGGAGGACGAGGGCACAGTACAACCTCCACTGGAGGGACACTACAGAGACGACCCGTCT
 GTGATCAATATTTCTGATGAAATGTCAAAGACTGCCATGTGGGGAACTTCTAGTTACTGCTGACAACT
 CAAAAGAAAAGGAGTACGCTTTCTTCTAAAAGCAATGAAAGCCGAAAGGAGAAGAAAGCTGACTCAGG
 GAAAGGCGTTGACAGGGAGACTGTCTATGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** Sgfl-Mlul
- ACCN:** NM_001242379
- Insert Size:** 3321 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_001242379.1](#), [NP_001229308.1](#)

RefSeq Size: 5424 bp

RefSeq ORF: 3321 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 (3) lacks an alternate in-frame exon compared to variant 1. The resulting isoform (3) lacks an alternate internal segment 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.