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Product datasheet for MC229404

Slc4a10 (NM_001242378) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Slc4a10 (NM_001242378) 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:	>MC229404 representing NM_001242378 Red=Cloning site Blue=ORF Orange=Stop codon TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGGAGATTAAAGACCAGGGAGCCCAAATGGAGCCGCTGCTGCCTACGAGAAATGATGAAGAAGCCGTTG TGGATAGAGGTGGAACACGCTCTATTCTCAAAACACATTTTGAGAAAGAAGATTTAGAAGGTCATCGGAC ATTATTTATTGGAGTTCATGTGCCCCTGGGTGGAAGAAAAAGCCATCGTCGTCACAGGCATCGTGGTCAT AAGCACAGAAAGAGGGACAGAGAGAGAGATTCGGGACTGGAGGATGGAAGAGAGTCCCCTTCTTTTGACA CCCCATCGCAGAGGGTGCAGTTTATTCTTGGAACTGAGGACGATGATGAGGAGCACCTCCCTCATGACCT TTTCACAGAGCTGGATGAGATTTGCTGGCGTGAAGGGGAAGATGCTGAGTGGCGAGAGACAGCCAGGTGG TTGAAATTTGAAGAGGATGTGGAAGATGGAGGAGAAAGATGGAGTAAGCCCTATGTGGCCACGCTTTCAT TACACAGCTTGTTTGAGTTGAGAAGCTGCATCCTGAATGGAACTGTGCTACTGGACATGCATGCCAACAC GATAGAAGAAATTGCAGATATGGTCCTTGACCAGCAGGTCAGCTCAGGCCAGCTGAATGAAGATGTTCGC CACAGGGTCCACGAAGCATTGATGAAGCAGCATCATCACCAGAATCAGAAAAAACTGGCTAACAGGATTC CTATTGTCCGATCTTTTGCTGATATTGGCAAGAAACAATCAGAACCAAATTCCATGGATAAAAATGCAGG TCAGGTTGTTTCTCCTCAGTCTGCTCCAGCCTGTGCTGAGAATAAAAATGATGTCAGCAGGGAAAACAGC ACTGTAGACTTCAGCAAGGGACTGGGAGGCCAACAAAAGGGGCATACTAGTCCATGTGGGATGAAACAAA GGCTTGACAAAGGACCTCCACACCAGCAGGAGAGAGAGGTTGATCTGCATTTTATGAAAAAGATTCCTCC GGGTGCTGAAGCTTCAAACATCTTGGTAGGAGAACTGGAGTTCCTAGACAGAACTGTGGTTGCCTTTGTC AGGTTGTCTCCAGCTGTCTTGCTCCAAGGACTTGCTGAAGTTCCAATCCCAAGCAGATTTCTGTTCATCC TTCTGGGACCCCTGGGAAAGGGTCAACAGTACCACGAGATTGGCAGATCGATTGCGACCTTAATGACTGA TGAGGTGTTTCATGATGTTGCTTACAAAGCTAAAGACCGCAATGACTTGGTATCAGGAATTGATGAGTTT CTGGATCAGGTTACCGTTCTTCCTCCTGGAGAATGGGATCCAAGCATACGAATAGAACCTCCCAAAAATG TCCCTTCCCAGGAGAAGAGGAAGATTCCTGCTGTACCAAATGGAACAGCAGCTCATGGCGAAGCTGAGCC ACATGGAGGACACAGCGGACCTGAACTCCAGCGAACTGGGAGGATTTTTGGGGGACTTATATTAGATATC AAAAGAAAGGCTCCATTCTTCTGGAGTGACTTCAGGGATGCTTTCAGCCTGCAGTGCTTAGCATCGTTCC

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TGTTTCTCTACTGTGCATGCATGTCTCCTGTCATCACATTTGGAGGACTGTTGGGAGAAGCAACTGAAGG
TCGTATAAGTGCAATCGAATCACTCTTTGGAGCATCTATGACCGGGATAGCCTATTCTCTTTTTGGTGGA
CAGCCCCTGACCATATTAGGCAGCACAGGACCTGTTTTGGTGTTTGAAAAGATCTTGTTTAAGTTTTGCA
AGGAATACGGCCTGTCGTACTTGTCCTTACGGGCCAGCATTGGGCTCTGGACTGCAACACTGTGCATCAT
CCTTGTGGCCACGGACGCGAGCTCACTCGTCTGCTACATCACCCGGTTTACCGAAGAGGCTTTTGCTTCT
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CCTCAAGCTCGAATCAGAGTGCTCTGCTCCAGGAGAACAACCCAAGTTTCTCGGCATTCGGGAGCAGAGG
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CCATGCCAGTGTTATACGGAGTGTTTCTTTATATGGGTGCTTCGTCTCTCAAAGGAATTCAGTTATTTGA
TAGAATAAAGCTCTTCTGGATGCCAGCCAAACATCAACCAGATTTCATCTATCTAAGGCACGTGCCCCTC
CGGAAAGTCCATCTCTTCACAGTCATTCAGATGAGTTGTCTCGGCCTTCTGTGGATAATCAAAGTTTCGA
GAGCTGCTATTGTCTTTCCTATGATGGTGTTGGCACTAGTGTTTGTGAGAAAGTTGATGGACTTCTTGTT
TACCAAACGGGAACTCAGCTGGCTTGATGATTTAATGCCTGAGAGTAAAAAGAAGAAACTTGAAGATGCT
GAGAAAGAAGAAGAACAAAGTATGCTAGCCATGGAGGACGAGGGCACAGTACAACTCCCACTGGAGGGAC
ACTACAGAGACGACCCGTCTGTGATCAATATTTCTGATGAAATGTCAAAGACTGCCATGTGGGGGAACCT
TCTAGTTACTGCTGACAACTCAAAAGAAAAGGAGTCACGCTTTCCTTCTAAAAGCAATGAAAGCCGAAAG
GAGAAGAAAGCTGACTCAGGGAAAGGCGTTGACAGGGAGACTTGTCTATGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_001242378

Insert Size: 3411 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_001242378.1, NP_001229307.1
RefSeq Size:	5514 bp
RefSeq ORF:	3411 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/biocarbonate 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 (1) encodes the longest 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.