

Product datasheet for MR231594

Slc4a10 (NM_001242380) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Slc4a10 (NM_001242380) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Slc4a10
Synonyms:	mKIAA4136; NCBE
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>MR231594 representing NM_001242380 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGATTAAGACCAGGGAGCCCAAATGGAGCCGCTGCTGCCTACGAGAAATGATGAAGAAGCCGTTG
TGGATAGAGGTGGAACACGCTCTATTCTCAAACACATTTTGAGAAAGAAGATTTAGAAGTCATCGGAC
ATTATTTATTGGAGTTCATGTGCCCTGGGTGGAAGAAAAGCCATCGTCGTACAGGCATCGTGGTCAT
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CCCCATCGCAGAGGGTGCAGTTTATTCTTGAACTGAGGACGATGATGAGGAGCACCTCCCTCATGACCT
TTTCACAGAGCTGGATGAGATTTGCTGGCGTGAAGGGGAAGATGCTGAGTGGCGAGAGACAGCCAGGTGG
TTGAAATTTGAAGAGGATGTGGAAGATGGAGGAGAAAGATGGAGTAAGCCCTATGTGGCCACGCTTTCAT
TACACAGCTTGTTTGAGTTGAGAAGCTGCATCCTGAATGGAAGTGTGCTACTGGACATGCATGCCAACAC
GATAGAAGAAATGCAGATATGGTCCTTGACCAGCAGGTGAGTCCAGGCCAGTGAATGAAGATGTTCCG
CACAGGGTCCACGAAGCATTGATGAAGCAGCATCATCACCAGAATCAGAAAAAATGGCTAACAGGATTC
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TCAGTTGTTTCTCCTCAGTCTGCTCCAGCCTGTGCTGAGAATAAAAAATGATGTCAGCAGGGAAAAACAGC
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TTCTGGGACCCCTGGGAAAGGTCAACAGTACCACGAGATTGGCAGATCGATTGCGACCTTAATGACTGA
TGAGGTGTTTCATGATGTTGCTTACAAAGCTAAAGACCGCAATGACTTGGTATCAGGAATTGATGAGTTT
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AAAAGAAAGGCTCCATTCTTCTGGAGTGACTTCAGGGATGCTTTCAGCCTGCAGTCTTAGCATCGTTCC



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TGTTTCTCTACTGTGCATGCATGTCCTCTCATCACATTTGGAGGACTGTTGGGAGAAGCAACTGAAGG
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 CCATGCCAGTGTATACGGAGTGTCTTTTATATGGGTGCTTCGCTCTCAAAGGAATTCAGTTATTTGA
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 CGGAAAGTCCATCTTTCACAGTCATTCAGATGAGTTGTCTCGGCCTTCTGTGGATAATCAAAGTTTGA
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 GAGAAAAGAAGAAGAAAGATAGTCCATGGAGGACGAGGGCAGTACAACCTCCACTGGAGGGAC
 ACTACAGAGACGACCCGCTGTGATCAATATTTCTGATGAAATGTCAAAGACTGCCATGTGGGGAACT
 TCTAGTTACTGCTGACAACTCAAAGAAAAGGAGTCACGCTTTCCTTCTAAAAGCTCCCCTTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR231594 representing NM_001242380
 Red=Cloning site Green=Tags(s)

MEIKDQGAQMEPLLPTRNDEEAVVDRGGTRSILKTHFEKEDLEGHRTLFIGVHVPLGGRKSHRRHRHRGH
 KHRKRDRERDSGLEDRSPSFDTPSQRVQFILGTEDDDEEHLPHDLFTELDEICWREGEDAEWRETARW
 LKFEEDVEDGGERWSKPYVATLSLHSLFELRSCILNGTVLLDMHANTIEEIAMVLDQQVSSGQLNEDVR
 HRVHEALMKQHQQKLANRIPVRSFADIGKKQSEPNMSMDKNAGQVSPQSAPACAENKNDVSRNS
 TVDFSKGLGGQKQHTSPCGMKQRLDKGPPHQQEREVDLHFMKKIPPGAEASNILVGELEFLDRTVAVFV
 RLSPAVLLQGLAEVPIPSRFLFILLGPLGKGQYHEIGRSIATLMTDEVFHDVAYAKDRNDLVSGIDEF
 LDQVTVLPPGEWDPISIRIEPPKNVPSQEKRKIPAVPNGTAAHGEAEPHGGHSGPELQRTGRIFGGLILDI
 KRKAPFFWSDFRDAFLQCLASFLFLYCACMSPVITFGLLGEATEGRISAIESLFGASMTGIAYSLFGG
 QPLTILGSTGPVLFVFEKILFKFCKEYGLSYLSLRASIGLWTATLCIILVATDASSLVCIYTRFTEEFAS
 LICIIIFIYEALFKLSELYPINMHNDLELLTQYSCNCEPHSPSNDTLKEWRESNLSASDIWGNLTV
 SECRSLHGEYVGRACGHGHPYVPDVLFWSVILFFSTVTMSATLKQFKTSRYFPTKVRISIVSDFAVFLTIL
 CMVLIDYAIIGIPSPKLQVPSVFKPTRDDRGWVFTPLGPNPWWTIIAIIIPALLCTILIFMDQQITAVIIN
 RKEHKLKGCYHLDLLMVAVMLGVCSIMGLPWFVAATVLSITHVNSLKESECSAPGEQPKFLGIREQR
 VTGLMIFILMGSSVFMSTILKFIIPMPVLYGVFLYMGASSLKGIIQLFDRIKLFWMPAKHQPDFIYLRHVPL
 RKVHLFTVIQMSCLGLLWIKVSRAAIVFPMMLALVFRKLMDFLFTKREL SWLDDLMPESKKKKLEDA
 EKEEEQSMAMEDEGTVQLPLEGHYRDDPSVINISDEMSKTAMWGNLLVTADNSKEKESRFPKSSPS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

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:	<ol style="list-style-type: none">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:	<u>NM_001242380.1, NP_001229309.1</u>
RefSeq Size:	5553 bp
RefSeq ORF:	3357 bp
Locus ID:	94229
UniProt ID:	<u>Q5DTL9</u>
Cytogenetics:	2 C1.3
MW:	126.3 kDa
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]