

## Product datasheet for MR211614

### Slc4a10 (NM\_033552) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Slc4a10 (NM\_033552) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Slc4a10  
**Synonyms:** mKIAA4136; NCBE  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >MR211614 representing NM\_033552  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGGATCGCC

ATGGAGATTAAGACCAGGGAGCCAAATGGAGCCGCTGCTGCCTACGAGAAATGATGAAGAAGCCGTTG  
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 CCCCATCGCAGAGGGTGCAGTTTATTCTTGAAGTGGAGCAGATGATGAGGAGCACCTCCCTCATGACCT  
 TTTCACAGAGCTGGATGAGATTTGCTGGCGTGAAGGGGAAGATGCTGAGTGGCGAGAGACAGCCAGGTGG  
 TTGAAATTTGAAGAGGATGTGGAAGATGGAGGAGAAAGATGGAGTAAGCCCTATGTGGCCACGCTTTCAT  
 TACACAGCTTGTTTGAGTTGAGAAGCTGCATCCTGAATGGAAGTGTGCTACTGGACATGCATGCCAACAC  
 GATAGAAGAAATTGCAGATATGGTCCTTGACCAGCAGGTCAGCTCAGGCCAGCTGAATGAAGATGTTTCGC  
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 CTGGAGTGACTTCAGGGATGCTTTCAGCCTGCAGTGTAGCATGTTCTGTTTCTACTGTGCATGC



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ATGTCTCCTGTCATCACATTTGGAGGACTGTTGGGAGAAGCAACTGAAGGTCGTATAAGTCAATCGAAT  
 CACTCTTTGGAGCATCTATGACCGGGATAGCCTATTCTCTTTTTGGTGGACAGCCCTGACCATATTAGG  
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 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR211614 representing NM\_033552  
 Red=Cloning site Green=Tags(s)

MEIKDQGAQMEPLLPTRNDEEAVVDRGGTRSILKTHFEKEDLEGHRTLFIGVHVPLGGRKSHRRHRHRGH  
 KHRKRDRERDSGLEDRSPSFDTPSQRVQFILGTEDDDEEHLPHDLFTELDEICWREGEDAEWRETARW  
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 MSPVITFGGLLGEATEGRISAIESLFGASMTGIAYSLFGGQPLTILGSTGPVLFVEKILFKFKKEYGLSY  
 LSLRASIGLWATLICIILVATDASSLVCIYTRFTEEFASLICIIFIYEALEKLFELSETYPINMHNDLE  
 LLTQYSCNMEPHSPSNDTLKEWRESNLSASDIWGNLTVSECRSLHGEYVGRACGHGHPYVPDVLFWV  
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 WFTVPLGPNPWWTIIAAIIPALLCTILIFMDQGITAVIINRKEHLKKGCGYHLDLLMVAVMLGVCSIMG  
 LPWFVAATVLSITHVNSLKLESECSAPGEQPKFLGIREQRTGLMIFILMGSSVFMSTILKFIIMPVLYG  
 VFLYMGASSLKGILQFDRIKLFWMPAKHQPDFIYLRHVPLRKHVHLFTVIQMSCLGLLWIKVSRRAIVFP  
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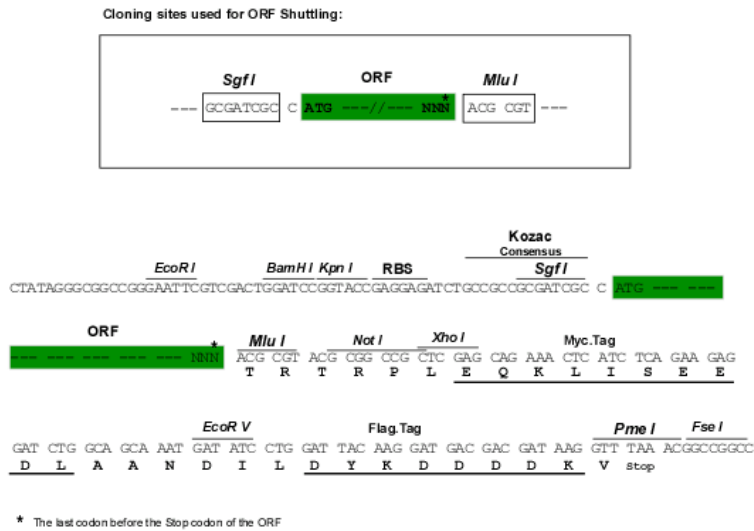
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mm9011\\_h08.zip](https://cdn.origene.com/chromatograms/mm9011_h08.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_033552

ORF Size: 3264 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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\\_033552.3](#), [NP\\_291030.2](#)

RefSeq Size: 5463 bp

RefSeq ORF: 3267 bp

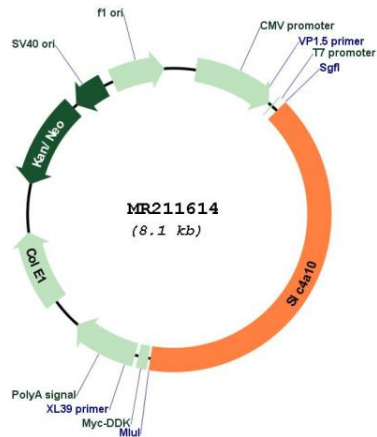
Locus ID: 94229

**Cytogenetics:** 2 C1.3

**MW:** 123 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/biocardonate 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]

**Product images:**



Circular map for MR211614