

## Product datasheet for **MG211614**

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

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Slc4a10 (NM_033552) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Slc4a10
Synonyms:	mKIAA4136; NCBE
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG211614 representing NM_033552 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGAGATTAAGACCAGGGAGCCAAATGGAGCCGCTGCTGCCTACGAGAAATGATGAAGAAGCCGTTG  
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AAGCACAGAAAGAGGGACAGAGAGAGATTCCGGACTGGAGGATGGAAGAGAGTCCCTCTTTTGACA  
CCCCATCGCAGAGGGTGCAGTTTATTCTTGAAGTGGAGGACGATGATGAGGAGCACCTCCCTCATGACCT  
TTTCACAGAGCTGGATGAGATTTGCTGGCGTGAAGGGGAAGATGCTGAGTGGCGAGAGACAGCCAGGTGG  
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CTATTGTCGATCTTTGCTGATATTGGCAAGAAACAATCAGAACCAATTCATGGATAAAAAATGCAGG  
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CTGAATCCAGCGAACTGGGAGATTTTGGGGGACTTATATTAGATATCAAAGAAAGGCTCCATTCTT  
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TATGCTAGCCATGGAGGACGAGGGCAGTACAACCTCCACTGGAGGGACACTACAGAGACGACCCGTCT
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ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>MG211614 representing NM\_033552  
 Red=Cloning site Green=Tags(s)

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MEIKDQGAQMEPLLPTRNDEEAVVDRGGTRSIKTHFEKEDLEGHRTLFIGVHVPLGGRKSHRRHRHRGH
KHKRDRERDRSGLDGRSPSFDTPSQRVQFILGTEDDDEEHLPHDLFTELDEICWREGEDAEWRETARW
LKFEEDVEDGGERWSKPYVATLSLHSLFELRSCILNGTVLLDMHANTIEEIAMVLDQQVSSGQLNEDVR
HRVHEALMKQHHHQKLANRIPVRSFADIGKKQSEPNMSMDKNAGQVSPQSAPACAENKNDVSRENS
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GQQYHEIGRSIATLMTDEVFHDVAYKAKDRNDLVSGIDEFLDQVTVLPGEWDPISIRIEPPKNVPSQEKR
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TRTRPLE - GFP Tag - V

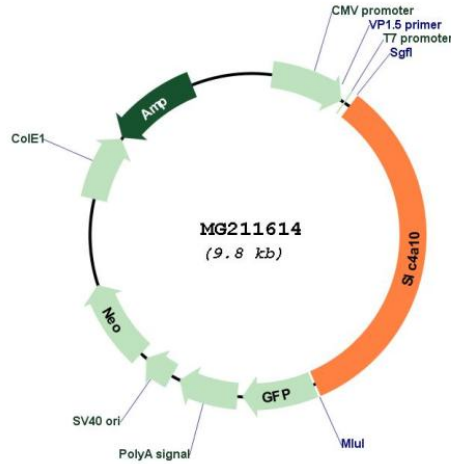
**Restriction Sites:**

Sgfl-Mlul

Cloning Scheme:



Plasmid Map:



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.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u><a href="#">NM_033552.3</a></u> , <u><a href="#">NP_291030.2</a></u>
<b>RefSeq Size:</b>	5463 bp
<b>RefSeq ORF:</b>	3267 bp
<b>Locus ID:</b>	94229
<b>Cytogenetics:</b>	2 C1.3
<b>Gene Summary:</b>	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]