

## Product datasheet for **MR210360**

### **Slc26a6 (NM\_134420) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Slc26a6 (NM_134420) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Slc26a6
Synonyms:	B930010B04Rik; CFEX; Pat-1; Pat1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>MR210360 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

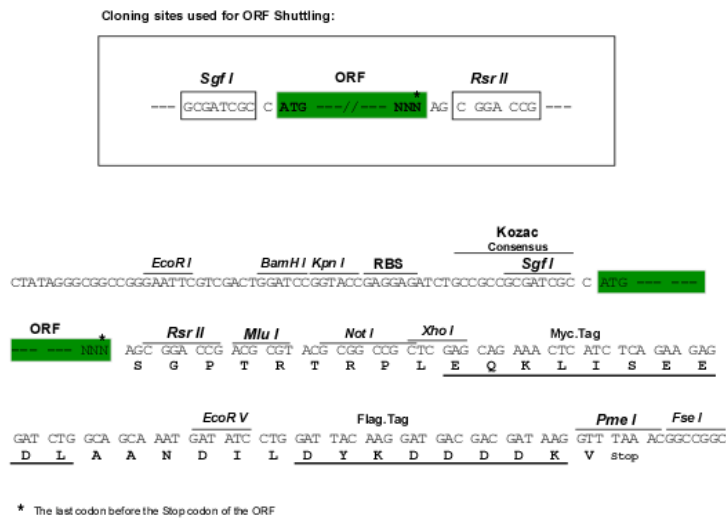
ATGGAGCTGCAGAGGAGAGACTACCATGTGAAAGGCCATTGCTGAACCAGGAGCAGCTAGAAGATCTGG  
GGCATTGGGGCCAGCGCGAAGACCCACCAGTGGCGAACTTGGTTCCGATGCTCCCGTGCTCGGGCCCA  
TTCTCTTCTGCTCCAGCAGTTCAGTCCCTGGGCTGGTTACCCCGGTATCCTGTGCGTGAATGGCTCCTG  
GGTGATCTGTTATCTGGCCTGAGTGTGGCCATCATGCAGCTTCCTCAGGGCTTGGCCTATGCCCTTCTGG  
CGGGATTGCCCTATGTTTGGTCTGTACAGTCTTTCTACCCCGTCTTCATCTACTTCTGTTTGGTAC  
CTCCAGACACATCTCTGTGGGACCTTTGCTGTAATGTCTGTGATGGTGGGCAGTGTGACAGAATCTCTG  
ACAGCAGATAAAGCCTTCGTGCAAGGCTTGAATGCCACAGCTGATGATGCACGCTGCAGGTGGCCTACA  
CACTCAGTTCCTGGTCGGCCTTCCAGGTGGGCTGGGCTGGTACACTTCGGCTTCGTTGTACACCTA  
CCTGTCAGAGCCTCTGGTCCGACAGTATACCACGGCTGCATCTGTGCAAGTCTCGTCTCTCAGCTCAAG  
TATGTGTTTGGCATCAAACCTCAGCAGTCACTCTGGGCCACTGTCCGTTATCTATACAGTGTGGAGGTCT  
GTGCCAGCTCCCTGAGACTGTGCCCGCACCGTGGTCACGGCGATTGTGGCAGGAGTGGCCTTGGTACT  
GGTGAAGCTACTTAATGAGAAGCTGCATCGGCGTCTGCCCTGCCCATCCCTGGGGAACACTCACGCTC  
ATTGGGGCCACTGGTATTTCTATGGTGTGAAGCTGAATGACAGATTCAGGTTCGATGTGGTGGGCAACA  
TCACCACAGGGCTCATACCCCGGTGGCACCAAGACAGAGCTGTTTGAACGCTTGTGGGAAATGCCTT  
TGCCATTGCTGTGGTGGGCTTCGCCATTGCCATCTCACTGGGGAAGATCTTTGCCCTGAGGCATGGCTAC  
CGTGTGGACAGTAACCAGGAGCTGGTAGCCCTTGGCCTCAGTAACCTCATTGGAGGCTTCTCCAGTGTCT  
TCCCGTGAGCTGCTCCATGTCTCGGAGCTTGGTACAGGAGAGCACGGGAGGCAACACACAGGTTGCTGG  
AGCTGTATCTTCCCTTTTATCCTTCTTATTATCGTCAAACCTTGGGGAACCTTCCGAGACCTGCCAAG  
GCCGCTCCGGCTGCTGCTATTATTGTGAACCTAAAGGGCATGATGAAGCAGTTCTCAGACATCTGCTCTC  
TTTGAAGGCAACAGAGTGGACCTGCTAATCTGGCTGGTACCTTTGTGGCCACAATCCTGCTGAACCT  
GGACATTGGCCTGGCAGTTCCATAGTCTTCTCCTTGCTGCTCGTGGTCGTCGGAATGCAGCTGCCCAT  
TACTCCGTCCTGGGGCAGGTGCCAGATACGGATATTTATAGAGACGTGGCAGAATACTCTGGGGCAAGG  
AGGTCCCGGTGTGAAAGTCTTCCGTTCTCAGCCACGCTGTACTTCGCAATGCTGAGCTCTACAGCGA  
CTCTCTGAAAGAGAAGTGCAGTGTAGATGTTGACCGCTCATCACCAGAAAGAAAAACGAATCAAAAAG  
CAGGAGATGAAGTTAAAGCGAATGAAGAAAGCCAAGAAGTCCCAGAAACAGGATGCTTCTCCAAGATCT  
CCTCAGTTTCCGTCAACGTCAACACCAACTTGAAGACGTCAAAGCAATGACGTCGAGGGCTCTGAGGC  
CAAGGTGCACCAAGGGGAGGAGCTTCAAGATGTAGTCTCCAGCAATCAAGAAGATGCCAAGGCCCAACC  
ATGACCTCACTGAAGTCCCTGGGCTGCCTCAGCCAGGCTTCCATAGCCTCATCCTGGACCTGAGCACCC  
TCTCCTTTGTGGACACTGTGTGCATTAAGAGCCTGAAGAATATTTCCGTCGACTTCGGGAGATTGAAGT  
GGAAGTGTACATCGCAGCCTGTTACAGTCTGTGGTCGCCAGCTTGAAGCTGGACACTTCTTTGATGAA  
TCTATCACTAAGCAGCATGTCTTTGCCTGTCCATGACGCTGTGACCTTTGCCCTCAGCCACCGGAAGT  
CTGTCCCTAAGAGCCCTGTTTGGCCACCAAACCT

**Protein Sequence:** >MR210360 protein sequence  
 Red=Cloning site Green=Tags(s)

MELQRDDYHVERPLLNQEQLEDLGHWGPAAKTHQWRTWFRCSRARAHSLLLQHVPVLGWLPRYPVREWLL  
 GDLLSGLSVAIMQLPQGLAYALLAGLPPMFGLYSSFYVPVFIYFLFGTSRHSISVGTFAVMSVMVGSVTE  
 TADKAFVQGLNATADDARVQVAYTLSFLVGLFQVGLGLVHFGFVVTYLSEPLVRSYTTAASVQVLVSQ  
 LKYVFGIKLSSHSGLPLSVIYTVLEVCAQLPETVPGTVVTAIVAGVALVLKLLNEKLHRRLLPLPIGELL  
 TLIGATGISYGVKLNDRFKVDVVGNIITGLIPPVAPKTELFATLVGNFAIAVVGFAIAISLGIKIFALRH  
 GYRVDSNQELVALGLSNLIGGFFQCFPVSCMSRSLVQESTGGNTQVAGAVSSLFILLIIVKLGELFRDLP  
 KAVLAAVIIVNLKGMKQFSDICSLWKANRVDLLIWLVTVFVATILLNLDIGLAVSIVFSLLLVVV  
 RMLPHYSVLGQVPDIDIYRDVAEYSGAKEVPGVKVFRSSATLYFANAELYDSLKEKCGVDVDR  
 LITQKKRIKQEMKLRMKKAKKSQKQDASSKISSVSVNVNTNLEDVKSNDVEGSEAKVHQEELQDVV  
 SSNQEDAKAPMTSLKSLGLPQPGFHSLLDLSTLSFVDTVCIKSLKNIFRDFREIEVEVYIAACYSP  
 VVAQLEAGHFDE SITKQHVFAVHDAVTFALSHRKSVPKSPVLATKL

**Restriction Sites:** SgfI-RsrII

**Cloning Scheme:**



**ACCN:** NM\_134420

**ORF Size:** 2208 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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\\_134420.2](#)

**RefSeq Size:** 3329 bp

**RefSeq ORF:** 2208 bp

**Locus ID:** 171429

**UniProt ID:** [Q8CIW6](#)

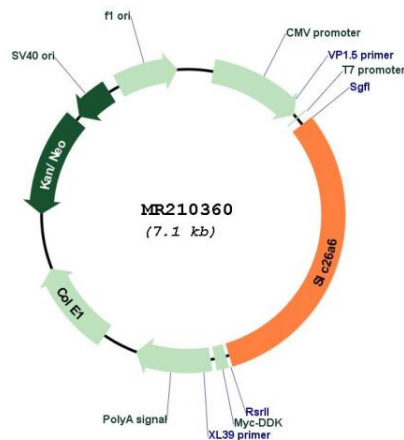
**Cytogenetics:** 9 F2

**MW:** 80.5 kDa

**Gene Summary:**

Apical membrane anion-exchanger with wide epithelial distribution that plays a role as a component of the pH buffering system for maintaining acid-base homeostasis. Acts as a versatile DIDS-sensitive inorganic and organic anion transporter that mediates the uptake of monovalent anions like chloride, bicarbonate, formate and hydroxyl ion and divalent anions like sulfate and oxalate. Function in multiple exchange modes involving pairs of these anions, which include chloride-bicarbonate, chloride-oxalate, oxalate-formate, oxalate-sulfate and chloride-formate exchange. Apical membrane chloride-bicarbonate exchanger that mediates luminal chloride absorption and bicarbonate secretion by the small intestinal brush border membrane and contributes to intracellular pH regulation in the duodenal upper villous epithelium during proton-coupled peptide absorption, possibly by providing a bicarbonate import pathway. Its association with carbonic anhydrase CA2 forms a bicarbonate transport metabolon; hence maximizes the local concentration of bicarbonate at the transporter site. Mediates also intestinal chloride absorption and oxalate secretion, thereby preventing hyperoxaluria and calcium oxalate urolithiasis. Transepithelial oxalate secretion, chloride-formate, chloride-oxalate and chloride-bicarbonate transport activities in the duodenum are inhibited by PKC activation in a calcium-independent manner. The apical membrane chloride-bicarbonate exchanger provides also a major route for fluid and bicarbonate secretion into the proximal tubules of the kidney as well as into the proximal part of the interlobular pancreatic ductal tree, where it mediates electrogenic chloride-bicarbonate exchange with a chloride-bicarbonate stoichiometry of 1:2, and hence will dilute and alkalinize protein-rich acinar secretion. Mediates also the transcellular sulfate absorption and oxalate secretion across the apical membrane in the duodenum and the formate ion efflux at the apical brush border of cells in the proximal tubules of kidney. Plays a role in sperm capacitation by increasing intracellular pH.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR210360