

Product datasheet for **RC235180**

SLC4A7 (NM_001258379) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: SLC4A7 (NM_001258379) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: SLC4A7
Synonyms: NBC2; NBC3; NBCN1; SBC2; SLC4A6
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RC235180 representing NM_001258379
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGAGGCTGATGGGGCCGGCAGCAGATGAGACCGCTACTACCCGGGGTCTGATGAAGAAGCTGTTG
TGGATCTTGGCAAACTAGCTCAACTGTGAACACCAAGTTTAAAAAGAAGAAGTAAAAAGTATAGAGC
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CATCACCACCGGAGAAGAAAAGATAAAGAATCAGATAAAGAAGATGGACGGGAATCTCCTCTTATGATA
CACCATCCAGAGAGTTCAGTTTATCCTTGGTACTGAAGATGATGATGAAGAACATATCCCATGATCT
CTTCACGGAAATGGATGAACTGTGTTACAGAGATGGAGAAGAATATGAATGGAAAGAACTGCTAGATGG
CTGAAATTTGAAGAGGATGTTGAAGATGGCGGTGACCGATGGAGTAAACCTTATGTGGCAACTCTCTCTT
TGCACAGTCTTTTTGAACTAAGGAGTTGCATCCTCAATGGAACAGTCATGCTGGATATGAGAGCAAGCAC
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TTTGGCCTCTCCCAAGTCTGCTCCTGGAACTGGACAATAGTAAAAGTGGAGAAATTAAGGTAATGGA
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CTACAGAAGGCAGAATAAGTGAATAGAGTCTCTTTTTGGAGCATCATTAACTGGGATTGCCTATTCATT
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC235180 representing NM_001258379
 Red=Cloning site Green=Tags(s)

MEADGAGEQMRPLLTRGPDEEAVVDLTKTSSTVNTKFEKEELESRAVYIGVHVPPSKESRRRHRHRGHK
 HHHRRRKDKESDKEDGRESPSYDTPSQRVQFILGTEDDDEEHIPDLFTEMDLICYRDGEEYEWKETARW
 LKFEEDVEDGGDRWSKPYVATLSLHSLFELRSCILNGTVMLDMRASTLDEIADMVLDNMIASGQLDESIR
 ENVREALLKRHHHQEKRFTRSRIPLVRSFADIGKKHSDPHLLERNGILAS PQSAPGNL DNSKSGEIKGNG
 SGGRENSTVDFSKVDMNFMRKIPTGAEASNVLVGEVDFLERPIIAFVRLAPAVLLTGLTEVPVPTRFLL
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 KFCRDYQLSYLSLRTSIGLWTSFLCIVLVATDASSLVCIYTRFTEEFAALICIFIYEALEKLFDLGET
 YAFNMHNNLDKLTSYSCVCTEPPNPSNETLAQWKKNITAHNISWRNLTVSECKLRGVFLGSACGHHGP
 YIPDVLFWCVILFFTTFFLSSFLKQFKTKRYFPTKVRSTISDFAVFLTIVIMVTIDYLVGVSPKLVHPE
 KFEPTHPERGWIISPLGDNPWWTLLIAAIPALLCTILIFMDQITAVIINRKEHKLKKGAGYHLDLLMVG
 VMLGVCSVMGLPWFVAATVLSISHVNSLKVESECSAPGEQPKFLGIREQRTGLMIFILMGLSVFMTSVL
 KFIPMPVLYGVFLYMGVSSLKGIQLFDRIKLFMPAKHQPDLYLRYVPLWKVHIFTVIQLTCLVLLWVI
 KVSAAAVVFPMMVLALVFVRKLMDCFTKRELSWLDLMPESKKKKEDDKKKKEKEEAERMLQDDDDTVH
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 RKKYVDAETSL

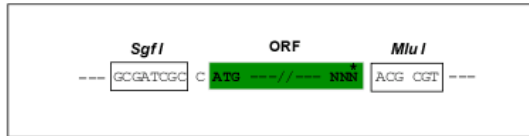
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

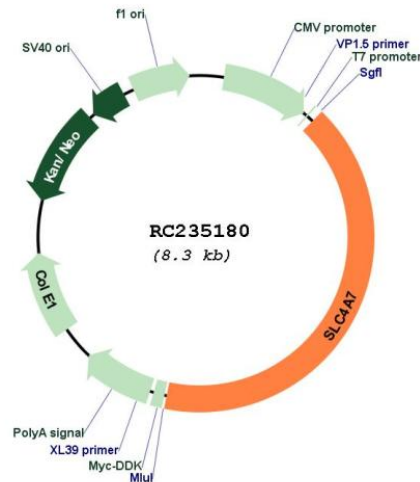
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_001258379

ORF Size: 3393 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_001258379.2](#)

RefSeq Size: 7741 bp

RefSeq ORF: 3396 bp

Locus ID: 9497

UniProt ID: [Q9Y6M7](#)

Cytogenetics: 3p24.1

Protein Families: Druggable Genome, Transmembrane

MW: 127.8 kDa

Gene Summary: This locus encodes a sodium bicarbonate cotransporter. The encoded transmembrane protein appears to transport sodium and bicarbonate ions in a 1:1 ratio, and is thus considered an electroneutral cotransporter. The encoded protein likely plays a critical role in regulation of intracellular pH involved in visual and auditory sensory transmission. Alternatively spliced transcript variants encoding distinct isoforms have been described. [provided by RefSeq, Apr 2012]