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Product datasheet for RC230654

SLC4A10 (NM_001178015) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SLC4A10 (NM_001178015) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	SLC4A10
Synonyms:	NBCn2; NCBE
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC230654 representing NM_001178015 Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGGAGATTAAAGACCAGGGAGCCCAAATGGAGCCGCTGCTGCCTACGAGAAATGATGAAGAAGCAGTTG TGGATAGAGGTGGAACTCGTTCTATTCTCAAAACACACTTTGAGAAAGAAGATTTAGAAGGTCATCGAAC ACTATTTATTGGAGTACATGTGCCCTTGGGAGGAAGAAAAAGCCATCGACGTCACAGGCATCGTGGTCAT AAACACAGAAAGAGAGACAGAGAAAGAGATTCAGGATTAGAGGATGGAAGGGAGTCACCTTCTTTTGACA CCCCATCACAGAGGGTACAGTTTATTCTTGGAACCGAGGATGATGACGAGGAACACATTCCTCATGACCT TTTCACAGAACTGGATGAGATTTGTTGGCGTGAAGGTGAGGACGCTGAGTGGCGAGAAACAGCCAGGTGG TTGAAGTTTGAAGAAGATGTGGAAGATGGAGGAGAAAGGTGGAGCAAGCCTTATGTGGCTACTCTTTCAT TGCACAGCTTGTTTGAATTGAGAAGTTGTATTCTGAATGGAACTGTGTTGCTGGACATGCATGCCAACAC TTTAGAAGAAATTGCAGATATGGTTCTTGACCAACAAGTGAGCTCAGGTCAGCTGAATGAAGATGTACGC CATAGGGTCCATGAGGCATTGATGAAACAGCATCATCATCAGAATCAGAAAAAACTCACCAACAGGATTC CCATTGTTCGTTCCTTTGCTGATATTGGCAAGAAACAGTCAGAACCAAATTCCATGGACAAAAATGCAGG TCAGGTTGTTTCTCCTCAGTCTGCTCCAGCCTGTGTTGAAAATAAAAATGATGTTAGCAGAGAAAACAGC ACTGTTGACTTTAGCAAGGGACTGGGAGGCCAACAAAAGGGGCATACTAGTCCATGTGGGATGAAACAAA GGCATGAAAAAGGACCTCCACACCAGCAAGAGAGAGAGGTTGATCTGCATTTTATGAAAAAGATTCCTCC AGGTGCTGAAGCATCGAACATCTTAGTGGGAGAACTGGAGTTCTTGGATCGAACAGTAGTTGCGTTTGTC AGGTTGTCTCCAGCTGTATTGCTTCAAGGACTGGCTGAAGTCCCAATCCCAACCAGATTTTTGTTCATTC TTCTGGGACCCCTGGGAAAGGGTCAACAGTACCATGAGATTGGCAGATCAATTGCAACCCTAATGACAGA TGAGGTATTTCATGATGTTGCCTATAAAGCTAAAGATCGTAATGACTTGGTATCAGGAATTGATGAGTTT CTGGATCAGGTTACTGTTCTCCCTCCTGGAGAATGGGATCCAAGCATTCGAATAGAGCCTCCCAAAAATG TTCCTTCCCAGGAGAAGAGGAAGATTCCTGCTGTACCAAATGGAACAGCAGCTCATGGGGAAGCAGAGCC CCACGGAGGACATAGTGGACCTGAACTCCAGCGAACTGGAAGGATTTTTGGGGGACTTATTTTAGATATC AAAAGAAAAGCTCCATACTTCTGGAGTGACTTCAGAGATGCTTTCAGCCTGCAGTGCTTAGCATCTTTTC

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Protein Sequence:

>RC230654 representing NM_001178015
Red=Cloning site Green=Tags(s)

MEIKDQGAQMEPLLPTRNDEEAVVDRGGTRSILKTHFEKEDLEGHRTLFIGVHVPLGGRKSHRRHRHRGH
KHRKRDRERDSGLEDGRESPSFDTPSQRVQFILGTEDDDEEHIPHDLFTELDEICWREGEDAEWRETARW
LKFEEDVEDGGERWSKPYVATLSLHSLFELRSCILNGTVLLDMHANTLEEIADMVLDQQVSSGQLNEDVR
HRVHEALMKQHHHQNQKKLTNRIPIVRSFADIGKKQSEPNSMDKNAGQVVSPQSAPACVENKNDVSRENS
TVDFSKGLGGQQKGHTSPCGMKQRHEKGPPHQQEREVDLHFMKKIPPGAEASNILVGELEFLDRTVVAFV
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LDQVTVLPPGEWDPSIRIEPPKNVPSQEKRKIPAVPNGTAAHGEAEPHGGHSGPELQRTGRIFGGLILDI
KRKAPYFWSDFRDAFSLQCLASFLFLYCACMSPVITFGGLLGEATEGRISAIESLFGASMTGIAYSLFGG
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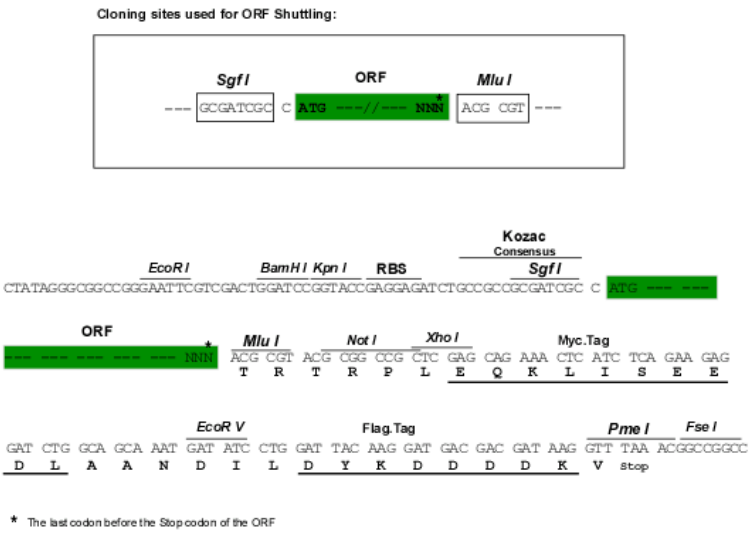
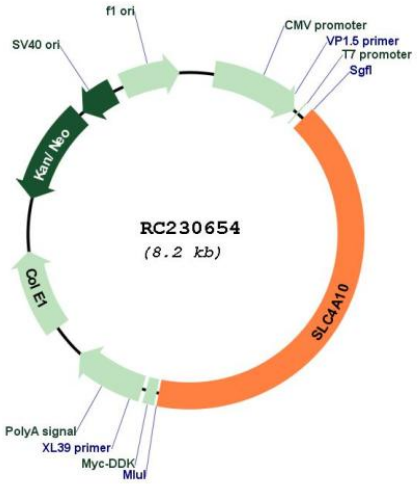
Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001178015

ORF Size: 3354 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 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_001178015.2

RefSeq ORF: 3357 bp

Locus ID: 57282

UniProt ID: Q6U841

Cytogenetics: 2q24.2

Protein Families: Druggable Genome, Transmembrane

MW: 126.4 kDa

Gene Summary: This gene belongs to a small family of sodium-coupled bicarbonate transporters (NCBTs) that regulate the intracellular pH of neurons, the secretion of bicarbonate ions across the choroid plexus, and the pH of the brain extracellular fluid. The protein encoded by this gene was initially identified as a sodium-driven chloride bicarbonate exchanger (NCBE) though there is now evidence that its sodium/bicarbonate cotransport activity is independent of any chloride ion countertransport under physiological conditions. This gene is now classified as a member A10 of the SLC4 family of transmembrane solute carriers. Alternative splicing results in multiple transcript variants encoding distinct isoforms.[provided by RefSeq, May 2010]