

## Product datasheet for **RG230554**

### Sodium bicarbonate transporter like protein 11 (SLC4A11) (NM\_001174089) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Sodium bicarbonate transporter like protein 11 (SLC4A11) (NM_001174089) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SLC4A11
Synonyms:	BTR1; CDPD1; CHED; CHED2; dj794I6.2; NABC1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG230554 representing NM\_001174089  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCCGCGGCCACCAGGCGGTGTTCCATCTGCAGCCGTGCGAAAACCTCTCCACCATGTCGAGAATG  
 GATACTTCGAGGATTCAAGCTACTACAAGTGTGACACAGATGACACCTTCGAAGCCCGAGAGGAGATCCT  
 GGGGATGAGGCCTTCGACACTGCCAACTCCTCCATCGTGTCTGGCGAGAGTATCCGTTTTTTTTGTCAAT  
 GTC AACCTTGAGATGCAGGCCACCAACTGAGAATGAAGCGACTTCCGGTGGCTGTGTGCTCCTGCACA  
 CCTCCGAAAAGTACCTGAAGTTAAAGAACTTCAAGGAAGAGATCCGTGCGCACCGCGACCTAGATGGCTT  
 CCTGGCGCAGGCCAGCATCGTCTGAACGAGACGGCCACCTCCCTGGATAACGTGCTGCGGACCATGCTT  
 CGCCGCTTCGCCAGGGACCTGACAACAATGAGCCCACTGCAACCTGGACCTGCTCATGGCCATGCTCT  
 TCACCGATGCCGGGCACCCATGCGGGTAAAGTCCACCTGCTGTCAGATACCATCAAGGGGTACCCGC  
 CACAGTGACAGGGGTGCGGTACACGAGTCTGGCTCTGCATCATCTGTACCATGAAGGCCCTACAGAAG  
 CGGCACGTGTGCATCAGCCGCTGGTTCGCCCACAGAACTGGGGGGAGAATTCCTGTGAGTTTCGGTTCG  
 TCATCCTGGTGTGGCCCCACCAAGATGAAAAGCACTAAGACTGCGATGGAGGTGGCGCCACGTTTGC  
 CACCATGTTCTCGGATATCGCCTTCCGCCAGAAGCTCCTGGAGACCCGCACAGAGGAGGAATTAAGGAG  
 GCCTTGGTGCATCAGAGACAGCTGCTCACCATGGTGAAGCACGGTCCAGTGGCGCCGAGAACGAAGGAAC  
 GCAGCACAGTCTCCCTCCCTGCCACAGACACCCAGAGCCCCAAAGTGAAGGACTTTGTCCCTTTTGG  
 GAAGGGCATCCGGGAGGACATCGCACGCAGGTTCCCTTGTACCCCTTGGACTTCACTGATGGCATTATT  
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 ACGCATGGACGGGCTGTGGAATAGTTTCTTCTTGCCTTTATGCCTTTTTCAACCTCAGCCTGGTCAT  
 GAGTCTCTTCAAGAGGTGACGGAGGAGATCATCGCCCTTTCATTTCCATCACGTTTGTGCTGGATGCC  
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 GGACTTCACTCCCTGTGAGCCTGTGAGGCTCGGGCCAGCCTCAACGCCAGCCTCCACTGCCCTCAA  
 CGCCAGCTTCTCGCCAGCCCCACGGAGCTGCCCTCGGCCACACTCAGGCCAGGCGACCCTGCTC  
 AGCCTCCTCATCATGCTGGGCACGCTCTGGCTGGCTACACCCTCTACCAATTCAAGAAGAGCCCTACC  
 TGACCCCTGCGTGCAGAGATCCTGTCCGACTGCGCCCTGCCATCGCGGTGCTCGCCTTCTCCCTCAT  
 CAGCTCCCATGGCTTCCGGGAAATCGAGATGAGCAAGTTCGGCTACAACCCAGCGAGAGCCCTTTGCG  
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 TGGATCCATGCCGCTACCCCACTCCCGCTGCACGTGCGAGCCCTGGCCTTAGTGGAGGAGCGTGTGG  
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 AGGAGCAGACTGCGTACCCCGACACTACATCCGGAGGGTCCCCAGAGGAAGATCCACTACTTAC  
 GGGCCTGCAGGTGCTTACGCTGCTGCTGTGTGCTTCCGATGAGCTCCCTGCCCTACATGAAGATG  
 ATCTTTCCCTCATCATGATCGCCATGATCCCCATCCGCTATATCCTGCTGCCCGAATCATTGAAGCCA  
 AGTACTTGGATGTCATGGACGCTGAGCACAGGCCT

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:** >RG230554 representing NM\_001174089  
 Red=Cloning site Green=Tags(s)

MAAATRRVFHLQPCENSPTMSQNGYFEDSSYYKCDTDDTFEAREEILGDEAFDTANSSIVSGESIRFFVN  
 VNLEMQATNTENEATSGGCVLLHTRSRYLKLKNFKEEIRAHRLDGLAQASIVLNETATSLDNVLRMTL  
 RRFARDPDNNEPNCNLDLLMAMLF TDAGAPMRGKVHLLSDTIQGVATVTVGVRYQSWLCTMKAQK  
 RHCISRLVSRPQNWGENSCEVRFVILVLAPPKMKSTKTAMEVARTFATMFSDIAFRQKLETRTEEFKE  
 ALVHQRQLLTMVSHGPVAPRTKERSTVSLPAHRHPEPPKCKDFVPFGKGIREDIARRFPLYPLDFDGGII  
 GKNKAVGKYITTTFLYFACLLPTIAFGSLNDENTDGAIDVQKTIAGQSIGLLYALFSGQPLVILLTTA  
 PLALYIQVIRVICDDYDLDFNSFYAWTGLWNSFFLALYAFFNLSLVMSLFKRSTEEIIALFISITFVLD  
 VKGTVKIFWKYYYGHYLDYHTKRTSSLVSLGASLNASLHTALNASFLASPTELPSATHSGQATAVL  
 SLLIMLGTWLWGYLYQFKKSPYLHPCVREILSDCALPIAVLAFSLISSHGFREIEMSKFRYNPSESPFA  
 MAQIQSLSLRAVSGAMGLGFLSMLFFIEQNLVAALVNAPENRLVKGTAYHWDLLLLAIINTGLSLFGLP  
 WIHAAYPHSPLHVRALALVEERVENGHIYDTIVNVKETRLTSLGASVLVGLSLLLLPVPLQWIPKPVLYG  
 LFLYIALTSLDGNQLVQRVALLLKEQTAYPPTHYIRRVQPKIHYFTGLQVLQLLLLCAFGMSSLPYMKM  
 IFPLIMIAMIPIRYILLPRIIEAKYLDVMDAHRP

TRTRPLE - GFP Tag - V

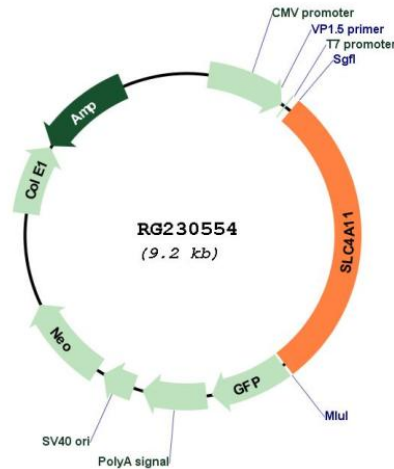
**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



**ACCN:** NM\_001174089

**ORF Size:** 2625 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\\_001174089.2](#)

**RefSeq Size:** 3118 bp

**RefSeq ORF:** 2628 bp

**Locus ID:** 83959

**UniProt ID:** [Q8NBS3](#)

**Cytogenetics:** 20p13

**Protein Families:** Transmembrane

**Gene Summary:** This gene encodes a voltage-regulated, electrogenic sodium-coupled borate cotransporter that is essential for borate homeostasis, cell growth and cell proliferation. Mutations in this gene have been associated with a number of endothelial corneal dystrophies including recessive corneal endothelial dystrophy 2, corneal dystrophy and perceptive deafness, and Fuchs endothelial corneal dystrophy. Multiple transcript variants encoding different isoforms have been described. [provided by RefSeq, Mar 2010]