

## Product datasheet for **RG238478**

### NHEDC2 (SLC9B2) (NM\_001300754) Human Tagged ORF Clone

#### Product data:

|                           |                                                                                |
|---------------------------|--------------------------------------------------------------------------------|
| Product Type:             | Expression Plasmids                                                            |
| Product Name:             | NHEDC2 (SLC9B2) (NM_001300754) Human Tagged ORF Clone                          |
| Tag:                      | TurboGFP                                                                       |
| Symbol:                   | NHEDC2                                                                         |
| Synonyms:                 | NHA2; NHE10; NHEDC2                                                            |
| Mammalian Cell Selection: | Neomycin                                                                       |
| Vector:                   | pCMV6-AC-GFP (PS100010)                                                        |
| E. coli Selection:        | Ampicillin (100 ug/mL)                                                         |
| ORF Nucleotide Sequence:  | >RG238478 representing NM_001300754.<br>Blue=ORF Red=Cloning site Green=Tag(s) |

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GCTCGTTTGTAGTAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGCACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGGATCGCC
ATGGGGGATGAAGATAAAAGAATTACATATGAAGATTCAGAACCATCCACAGGAATGAATTACAGCCC
TCCATGCATCAAGAAGCACAGGAGGAGACAGTTATGAAGCTCAAAGGTATAGATGCAAAATGAACCAACA
GAAGGAAGTATTCTTTGAAAAGCAGTGAAAAAAGCTACAAGAAACACCAACTGAAGCAAAATCACGTA
CAAAGACTGAGACAAATGCTGGCTTGCCTCCACATGGTTTACTGGACAGGGTCATAACAAATGGCATG
CTGCTTGCAAGGTTTCTCATCAGAAATATCCAGTCATCAACGATAATGTGCAGATCAAGCACAAGTGG
TCTTCTCTTTGAGAAGCATAGCCCTGTCTATCATTCTGGTTCGTGCTGGCCTTGGTCTGGATTCAAAG
GCCCTGAAGAAGTTAAAGGGCGTTTGTGAAGACTGTCCATGGGTCCCTGTATTGTGGAGGCGTGCACA
TCTGCTCTTCTTGCCATTACCTGCTGGGTTTACCATGGCAATGGGGATTATACTGGGTTTGTGTTTA
GGTGCTGTATCTCCAGCTGTTGTGGTGCCTTCAATGCTCCTTTTGCAGGGAGGAGGCTATGGTGTGAG
AAGGGTGTCCCAACCTTGCTCATGGCAGCTGGCAGCTTCGATGACATTCTGGCCATCACTGGCTTCAAC
ACATGCTTGGGCATAGCCTTTTCCACAGGCTCTACTGTCTTTAATGTCTCAGAGGAGTTTGGAGGTG
GTAATTGGTGTGGCAACTGGATCTGTTCTTGGATTTTTCATTCACTACTTTCCAAGCCGTGACCAGGAC
AACTTGTGTGAAGAGAACATTCCTTGTGTTGGGTTGTCTGTGCTAGCTGTGTTCAAGCAGTGTGCAT
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CTAATTGGAGCAGAGGTATCTATTGCATCTCTCAGACCAGAACTGTAGGCCTTTGTGTTGCCACCGTA
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GAAAAGATATTTATTTCTTTGTCATGGCTTCAAAGGCCACAGTTCAGGCTGCAATAGGATCTGTGGCT
TTGGACACAGCAAGGTCACATGGAGAGAAACAATTAGAAGACTATGGAATGGATGTGTTGACAGTGGCA
TTTTTGTCCATCCTCATCAGCCCAATTGGAAGTCTGCTTATTGGTTTACTGGCCCCAGGCTTCTG
CAGAAAGTTGAACATCAAAATAAAGATGAAGAAGTTCAAGGAGAGACTTCTGTGCAAGTT
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
  
```

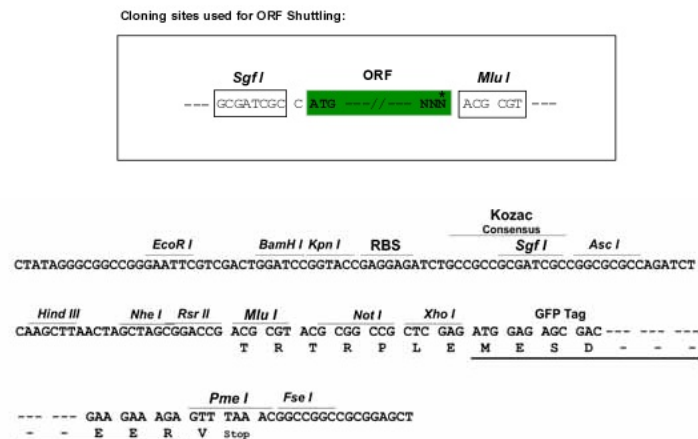

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**Protein Sequence:** >Peptide sequence encoded by RG238478  
 Blue=ORF Red=Cloning site Green=Tag(s)

MGDEDKRITYEDSEPSTGMNYTPSMHQEAQEETVMKLKGIDANEPTEGSILLKSSEKKLQETPTEANHV  
 QRLRQMLACPPHGLLDVRITNGMLLAGFLIRNIPVINDNVQIKHKWSSSLRSIALSILVRAGLGLDSK  
 ALKKLKGVCVRLSMGPCIVEACTSALLAHYLLGLPWQGFILGFVLGAVSPAVVPSMLLLQGGGYGVE  
 KGVPTLLMAAGSFDDILAITGFNTCLGIAFSTGSTVFNVLRGVLEVIVIGVATGSVLGFFIQYFPSRDQD  
 KLVCKRFTLVGLSVLAVFSSVHFGFPGSGGLCTLVMAFLAGMGWTSEKAEVEKIIAVAWDIFQPLLFG  
 LIGAEVSIASLRPETVGLCVATVGIAVLIRILTTFLMVCFAGFNLKEKIFISFAWLPKATVQAAIGSVA  
 LDTARSHGEKQLEDYGMDVLTVAFLSILITAPIGSLIIGLLPRLLQKVEHQNKDEEVQGETSVQV  
**TR**TRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV  
 MGYGFYHFGTYPGYPNPFHAINNGGYTNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED  
 SVIFTDKIIRSNAVEHLHPMGDNDLDGSFTRTFSLRDGGYYSSVDSHMHFKSAIHPSILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001300754

**ORF Size:** 1461 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](#)

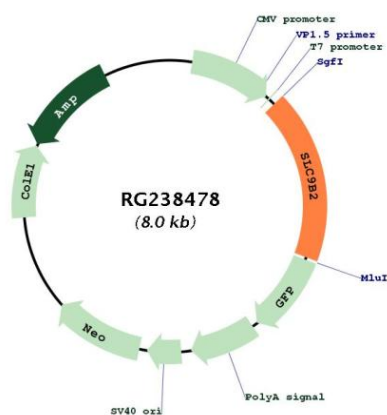
**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**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).

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

|                   |                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RefSeq:           | <u>NM_001300754.2</u>                                                                                                                                                                                                                                                                                                                                                     |
| RefSeq Size:      | 2604 bp                                                                                                                                                                                                                                                                                                                                                                   |
| RefSeq ORF:       | 1443 bp                                                                                                                                                                                                                                                                                                                                                                   |
| Locus ID:         | 133308                                                                                                                                                                                                                                                                                                                                                                    |
| Cytogenetics:     | 4q24                                                                                                                                                                                                                                                                                                                                                                      |
| Protein Families: | Druggable Genome, Transmembrane                                                                                                                                                                                                                                                                                                                                           |
| MW:               | 52 kDa                                                                                                                                                                                                                                                                                                                                                                    |
| Gene Summary:     | Sodium hydrogen antiporters, such as NHEDC2, convert the proton motive force established by the respiratory chain or the F1F0 mitochondrial ATPase into sodium gradients that drive other energy-requiring processes, transduce environmental signals into cell responses, or function in drug efflux (Xiang et al., 2007 [PubMed 18000046]).[supplied by OMIM, Mar 2008] |

## Product images:



Circular map for RG238478