

# **Product datasheet for SC311762**

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## SLC9A4 (AL833048) Human Untagged Clone

### **Product data:**

**Product Type:** Expression Plasmids

Product Name: SLC9A4 (AL833048) Human Untagged Clone

Tag: Tag Free
Symbol: SLC9A4
Synonyms: NHE4

**Vector:** pCMV6 series

Fully Sequenced ORF: >NCBI ORF sequence for AL833048, the custom clone sequence may differ by one or more

nucleotides

**Restriction Sites:** Please inquire

ACCN: AL833048

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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: <u>AL833048.1</u>, <u>CAH10600.1</u>

RefSeq Size: 1697 bp





### SLC9A4 (AL833048) Human Untagged Clone - SC311762

 RefSeq ORF:
 1697 bp

 Locus ID:
 389015

 Cytogenetics:
 2q12.1

**Protein Families:** Druggable Genome, Transmembrane

**Gene Summary:** Involved in pH regulation to eliminate acids generated by active metabolism or to counter

adverse environmental conditions. Major proton extruding system driven by the inward sodium ion chemical gradient. Plays an important role in signal transduction. May play a specialized role in the kidney in rectifying cell volume in response to extreme fluctuations of hyperosmolar-stimulated cell shrinkage. Is relatively amiloride and ethylisopropylamiloride (EIPA) insensitive. Can be activated under conditions of hyperosmolar-induced cell shrinkage

in a sustained intracellular acidification-dependence manner. Activated by 4,4'-

diisothiocyanostilbene-2,2'-disulfonic acid (DIDS) in a sustained intracellular acidification-dependence manner. Affects potassium/proton exchange as well as sodium/proton and lithium/proton exchange. In basolateral cell membrane, participates in homeostatic control of intracellular pH, and may play a role in proton extrusion in order to achieve transepithelial HCO3(-) secretion. In apical cell membrane may be involved in mediating sodium absorption. Requires for normal levels of gastric acid secretion, secretory membrane development, parietal cell maturation and/or differentiation and at least secondarily for chief cell

differentiation (By similarity).[UniProtKB/Swiss-Prot Function]