

Product datasheet for TL309270

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

SLC9A4 Human shRNA Plasmid Kit (Locus ID 389015)

Product data:

Product Type: shRNA Plasmids

Product Name: SLC9A4 Human shRNA Plasmid Kit (Locus ID 389015)

Locus ID: 389015 Synonyms: NHE4

Vector:pGFP-C-shLenti (TR30023)E. coli Selection:Chloramphenicol (34 ug/ml)

Mammalian Cell

Selection:

Puromycin

Format: Lentiviral plasmids

Components: SLC9A4 - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID =

389015). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.

RefSeq: NM 001011552, NM 001011552.1, NM 001011552.2, NM 001011552.3, BC160158

UniProt ID: Q6Al14

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]







shRNA Design:

These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our custom shRNA service.

Performance Guaranteed: OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).