

Product datasheet for RR205249L4

Slc8b1 (NM_001017488) Rat Tagged Lenti ORF Clone

Product data:

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

Product Type:	Expression Plasmids
Product Name:	Slc8b1 (NM_001017488) Rat Tagged Lenti ORF Clone
Tag:	mGFP
Symbol:	Slc8b1
Synonyms:	Slc24a6
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RR205249).
Restriction Sites:	Sgfl-Mlul
Cloning Scheme:	
	Cloning sites used for ORF Shuttling:
	Sgf I ORF Miu I GCG ATC GC ATG // NNN ACG CGT



ACCN: ORF Size: NM_001017488 1755 bp



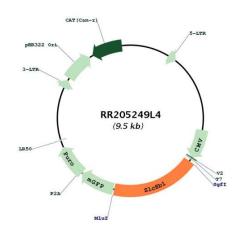
View online »

This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2024 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

Slc8b1 (NM_001017488) Rat Tagged Lenti ORF Clone – RR205249L4	
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. <u>More info</u>
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:	 Centrifuge at 5,000xg for 5min. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. Close the tube and incubate for 10 minutes at room temperature. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 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>NM 001017488.1, NP 001017488.1</u>
RefSeq Size:	2693 bp
RefSeq ORF:	1758 bp
Locus ID:	498185
UniProt ID:	<u>Q6AXS0</u>
Cytogenetics:	12q16
Gene Summary:	Mitochondrial sodium/calcium antiporter that mediates sodium-dependent calcium efflux from mitochondrion, by mediating the exchange of 3 sodium ions per 1 calcium ion. Plays a central role in mitochondrial calcium homeostasis by mediating mitochondrial calcium extrusion: calcium efflux is essential for mitochondrial function and cell survival, notably in cardiomyocytes (By similarity). Regulates rates of glucose-dependent insulin secretion in pancreatic beta-cells during the first phase of insulin secretion: acts by mediating efflux of calcium from mitochondrion, thereby affecting cytoplasmic calcium responses. Required for store-operated Ca(2+) entry (SOCE) and Ca(2+) release-activated Ca(2+) (CRAC) channel regulation: sodium transport by SLC8B1 leads to promote calcium-shuttling that modulates mitochondrial redox status, thereby regulating SOCE activity (By similarity). Involved in B- lymphocyte chemotaxis (By similarity). Able to transport Ca(2+) in exchange of either Li(+) or Na(+), explaining how Li(+) catalyzes Ca(2+) exchange. In contrast to other members of the family its function is independent of K(+) (By similarity).[UniProtKB/Swiss-Prot Function]

This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2024 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US

Product images:



Circular map for RR205249L4

This product is to be used for laboratory only. Not for diagnostic or therapeutic use. ©2024 OriGene Technologies, Inc., 9620 Medical Center Drive, Ste 200, Rockville, MD 20850, US