

Product datasheet for **MR224843L4V**

Slc8b1 (NM_001177594) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

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| Product Type: | Lentiviral Particles |
| Product Name: | Slc8b1 (NM_001177594) Mouse Tagged ORF Clone Lentiviral Particle |
| Symbol: | Slc8b1 |
| Synonyms: | AF261233; NCKX6; NCLX; Slc24a6 |
| Mammalian Cell Selection: | Puromycin |
| Vector: | pLenti-C-mGFP-P2A-Puro (PS100093) |
| Tag: | mGFP |
| ACCN: | NM_001177594 |
| ORF Size: | 1704 bp |
| ORF Nucleotide Sequence: | The ORF insert of this clone is exactly the same as(MR224843). |
| 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. |
| RefSeq: | NM_001177594.1 , NP_001171065.1 |
| RefSeq Size: | 2823 bp |
| RefSeq ORF: | 1707 bp |
| Locus ID: | 170756 |
| UniProt ID: | Q925Q3 |
| Cytogenetics: | 5 F |



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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 (PubMed:20018762, PubMed:28445457). 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 (PubMed:24067497, PubMed:28445457). 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 (By similarity). 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 (PubMed:27328625). Able to transport Ca(2+) in exchange of either Li(+) or Na(+), explaining how Li(+) catalyzes Ca(2+) exchange (By similarity). In contrast to other members of the family its function is independent of K(+) (By similarity). [UniProtKB/Swiss-Prot Function]