

## Product datasheet for **SR417216**

### Slc8b1 Mouse siRNA Oligo Duplex (Locus ID 170756)

#### Product data:

|                     |   |
|---------------------|---|
| Product Type:       | siRNA Oligo Duplexes  |
| Purity:             | HPLC purified   |
| Quality Control:    | Tested by ESI-MS  |
| Sequences:          | Available with shipment   |
| Stability:          | One year from date of shipment when stored at -20°C.  |
| # of transfections: | Approximately 330 transfections/2nmol in 24-well plate under optimized conditions (final conc. 10 nM).  |
| Note:               | Single siRNA duplex (10nmol) can be ordered.  |
| RefSeq:             | <a href="#">NM_001177594</a> , <a href="#">NM_001177595</a> , <a href="#">NM_133221</a>   |
| UniProt ID:         | <a href="#">Q925Q3</a>  |
| Synonyms:           | AF261233; NCKX6; NCLX; Slc24a6  |
| Components:         | Slc8b1 (Mouse) - 3 unique 27mer siRNA duplexes - 2 nmol each (Locus ID 170756)<br>Included - SR30004, Trilencer-27 Universal Scrambled Negative Control siRNA Duplex - 2 nmol<br>Included - SR30005, RNase free siRNA Duplex Resuspension Buffer - 2 ml   |
| 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).<br>[UniProtKB/Swiss-Prot Function] |



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**Performance  
Guaranteed:**

OriGene guarantees that at least two of the three Dicer-Substrate duplexes in the kit will provide at least 70% or more knockdown of the target mRNA when used at 10 nM concentration by quantitative RT-PCR when the TYE-563 fluorescent transfection control duplex (cat# SR30002) indicates that >90% of the cells have been transfected and the HPRT positive control (cat# SR30003) provides 90% knockdown efficiency.

For non-conforming siRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the siRNA kit. To arrange for a free replacement with newly designed duplexes, please contact Technical Services at [techsupport@origene.com](mailto:techsupport@origene.com). Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled siRNA control (quantitative RT-PCR data required).