

Product datasheet for **SR407826**

Acer1 Mouse siRNA Oligo Duplex (Locus ID 171168)

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: | NM_175731 |
| UniProt ID: | Q8R4X1 |
| Synonyms: | 2310024P18Rik; AI662009; Alkcdase1; Asah3; Cer1 |
| Components: | Acer1 (Mouse) - 3 unique 27mer siRNA duplexes - 2 nmol each (Locus ID 171168) Included - SR30004, Trilencer-27 Universal Scrambled Negative Control siRNA Duplex - 2 nmol Included - SR30005, RNase free siRNA Duplex Resuspension Buffer - 2 ml |
| Summary: | Endoplasmic reticulum ceramidase that catalyzes the hydrolysis of ceramides into sphingosine and free fatty acids at alkaline pH (PubMed:12783875). Ceramides, sphingosine, and its phosphorylated form sphingosine-1-phosphate are bioactive lipids that mediate cellular signaling pathways regulating several biological processes including cell proliferation, apoptosis and differentiation (PubMed:12783875). Exhibits a strong substrate specificity towards the natural stereoisomer of ceramides with D-erythro-sphingosine as a backbone and has a higher activity towards very long-chain unsaturated fatty acids like the C24:1-ceramide (PubMed:12783875). May also hydrolyze dihydroceramides to produce dihydrosphingosine (By similarity). ACER1 is a skin-specific ceramidase that regulates the levels of ceramides, sphingosine and sphingosine-1-phosphate in the epidermis, mediates the calcium-induced differentiation of epidermal keratinocytes and more generally plays an important role in skin homeostasis (PubMed:27126290, PubMed:29056331). [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. 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).