

Product datasheet for **SR405656**

Mreg Mouse siRNA Oligo Duplex (Locus ID 381269)

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:	<u>NM_001005423</u> , <u>NM_001357488</u>
UniProt ID:	<u>Q6NVG5</u>
Synonyms:	dsu; Gm974; Wdt2
Components:	Mreg (Mouse) - 3 unique 27mer siRNA duplexes - 2 nmol each (Locus ID 381269) Included - SR30004, Trilencer-27 Universal Scrambled Negative Control siRNA Duplex - 2 nmol Included - SR30005, RNase free siRNA Duplex Resuspension Buffer - 2 ml



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Summary:

Probably functions as cargo-recognition protein that couples cytoplasmic vesicles to the transport machinery (PubMed:22940130, PubMed:22275436, PubMed:30174147). Plays a role in hair pigmentation, a process that involves shedding of melanosome-containing vesicles from melanocytes, followed by phagocytosis of the melanosome-containing vesicles by keratinocytes (PubMed:15550542, PubMed:3410303, PubMed:22753477). Functions on melanosomes as receptor for RILP and the complex formed by RILP and DCTN1, and thereby contributes to retrograde melanosome transport from the cell periphery to the center (PubMed:22940130, PubMed:22275436). Overexpression causes accumulation of late endosomes and/or lysosomes at the microtubule organising center (MTOC) at the center of the cell (PubMed:19240024, PubMed:30174147). Probably binds cholesterol and requires the presence of cholesterol in membranes to function in microtubule-mediated retrograde organelle transport (PubMed:30174147). Binds phosphatidylinositol 3-phosphate, phosphatidylinositol 4-phosphate, phosphatidylinositol 5-phosphate and phosphatidylinositol 3,5-bisphosphate, but not phosphatidylinositol 3,4-bisphosphate or phosphatidylinositol 4,5-bisphosphate (PubMed:19240024). Required for normal phagosome clearing and normal activation of lysosomal enzymes in lysosomes from retinal pigment epithelium cells (PubMed:19240024). Required for normal degradation of the lipofuscin component N-retinylidene-N-retinylethanolamine (A2E) in the eye (PubMed:19240024). May function in membrane fusion and regulate the biogenesis of disk membranes of photoreceptor rod cells (Probable).[UniProtKB/Swiss-Prot Function]

**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).