

Product datasheet for SR407695

OriGene Technologies, Inc.

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Siglecg Mouse siRNA Oligo Duplex (Locus ID 243958)

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 172900</u>

UniProt ID: Q80ZE3

Synonyms: 9830164H23; A630096C01Rik; mSiglec-G; Siglec-G; Siglec10

Components: Siglecg (Mouse) - 3 unique 27mer siRNA duplexes - 2 nmol each (Locus ID 243958)

Included - SR30004, Trilencer-27 Universal Scrambled Negative Control siRNA Duplex - 2 nmol

Included - SR30005, RNAse free siRNA Duplex Resuspension Buffer - 2 ml



Summary:

Putative adhesion molecule that mediates sialic-acid dependent binding to cells. Preferentially binds to alpha-2,3- or alpha-2,6-linked sialic acid (PubMed:20038598). The sialic acid recognition site may be masked by cis interactions with sialic acids on the same cell surface. In the immune response, seems to act as an inhibitory receptor upon ligand induced tyrosine phosphorylation by recruiting cytoplasmic phosphatase(s) via their SH2 domain(s) that block signal transduction through dephosphorylation of signaling molecules (By similarity). Involved in negative regulation of B-cell antigen receptor signaling and specifically acts on B1 cells to inhibit Ca(2+) signaling, cellular expansion and antibody secretion (PubMed:17572677). The inhibition of B cell activation is dependent on PTPN6/SHP-1 (PubMed:23836061). In association with CD24 may be involved in the selective suppression of the immune response to danger-associated molecular patterns (DAMPs) such as HMGB1, HSP70 and HSP90 (PubMed:19264983). In association with CD24 may regulate the immune repsonse of natural killer (NK) cells (By similarity). Plays a role in the control of autoimmunity (PubMed:20200274). During initiation of adaptive immune responses by CD8-alpha(+) dendritic cells inhibits cross-presentation by impairing the formation of MHC class I-peptide complexes. The function seems to implicate recruitment of PTPN6/SHP-1, which dephosphorylates NCF1 of the NADPH oxidase complex consequently promoting phagosomal acidification (PubMed:27548433).[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).