

OriGene Technologies, Inc.

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Product datasheet for MR227607L4V

Siglecg (NM_172900) Mouse Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Siglecg (NM_172900) Mouse Tagged ORF Clone Lentiviral Particle
Symbol:	Siglecg
Synonyms:	9830164H23; A630096C01Rik; mSiglec-G; Siglec-G; Siglec10
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_172900
ORF Size:	2064 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(MR227607).
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. <u>More info</u>
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:	<u>NM 172900.3, NP 766488.2</u>
RefSeq Size:	2484 bp
RefSeq ORF:	2067 bp
Locus ID:	243958
UniProt ID:	<u>Q80ZE3</u>
Cytogenetics:	7 B3



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Gene 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]

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