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Product datasheet for MG227607

Siglecg (NM_172900) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Siglecg (NM_172900) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Siglecg
Synonyms:	9830164H23; A630096C01Rik; mSiglec-G; Siglec-G; Siglec10
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

ORF Nucleotide Sequence:

>MG227607 representing NM_172900
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCACTGCTGCTGTTCCTGCTGTCCTTCCTGTTGGATGGGCCTCAAGGTCAGATGGAGAGCTACTTCC
TACAGGTGCAGAGAATTGTGAAGGCACAGGAGGGTCTGTGCATCTTCGTGCCCTGCTCCTTCTCCTCCCC
TGAGGGAAAATGGCTTAACCGTTCCCCACTTTATGGCTACTGGTTCAAAGGCATCAGAAAACCATCACTT
TCATTTCCAGTGGCCACAAATAACAAAGATAAAGTGTTAGAATGGGAAGCCCGAGGGCGCTTCCAGCTCT
TGGGGGATATCTCTAAAAAGAACTGTTCCTTGCTAATCAAAGATGTTCAGTGGGGAGACTCAACAAACTA
TTTCTTCCGGATGGAGAGAGGATTTGAGAGATTCAGTTTCAAGGAGGAGTTCAGGCTACAAGTGGAAGCC
CTGACTCAGAAGCCAGATATCTTCATTCCTGAGGTCCTGGAGCCTGGGGAGCCAGTGACCGTTGTCTGCT
TGTTTTCCTGGACCTTCAACCAATGCCCAGCTCCTTCTTTCTCCTGGATGGGGGATGCTGTCTCCTTCCA
AGAAAGCAGACCGCACACATCCAATTACTCAGTTCTGAGCTTTATCCCAGGACTTCAACACCATGATACT
GAGCTCACATGTCAGCTGGACTTCTCTAGAATGAGCACACAAAGGACTGTCCGACTAAGAGTGGCCTATG
CCCCCAGATCTCTTGCTATCAGCATTTTCCATGACAATGTATCAGTCCCAGACTTGCATGAGAATCCTTC
ACATCTGGAAGTTCAGCAAGGCCAGTCTCTTCGCCTCCTCTGTACTGCTGACAGCCAGCCCCCTGCTACA
CTGAGCTGGGTCCTAGAGGACCAAGTCCTTTCTTGGTCTAGCCCTGTGGGGTCGAGAACCCTGGCACTAG
AGCTGCCCTGGGTGAAAGCTGGGGACTCTGGACACTACACTTGCCAAGCAGAGAATAGGCTGGGCTCCCA
GCAACATACCCTGGACCTCTCTGTGCTGTACCCCCCACAGGACCTGAGAGTGACTGTTTCCCAAGCAAAC
AGGACAGTGTTGGAAATCCTCAGGAATGCCATCTCCCTCCCAGTCCTGGAGGGCCAAAGCCTGTGCCTAG
TCTGTGTCACCTATAGCAATCCCCCAGCCAATGTGAGTTGGGCTTGGGTGACACAGACCCTGATCCCAAT
CCAGTCTTCAGAGCCTGGGGTCCTGGAGCTGCCTCTGGTCCAGAGAGAACATGAAGGAGAATTCACCTGT
GCTGCACAGAACCCACTGGGTGCCCAGCGCATCTCTCTGAGCCTCTCTGTGCACTACCCGCCCCAGATGT
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TTCAGCTCACTTGGACCCTGGGTCAACAGCTCCCTGAGCCTCCTTCAGGAGCTGGGGCCCAGCCTCTGGC
TCAGCTGTGAGTCCTGGAACACCCATGGAGCCCAGACCACCTCTGTCCTGCTGCTACCTGATAAAGACAG
TGCCACAGCATTCTCCAAGGGAGCAGTTTTGGGCTTTGGCATCACAGCCCTCCTTGCCCTGTGCCTCATC
GTGGTCATCGTGAAGACCCTCCAGAAGAAAGGAACCCAGGAGGAACCCTCCAGGCCCAAGCTCTCCCGGG
GCAGCACGATCCTGGACTACATCAATGTGGTCCCCAAGACCAGGTCCCTGGCTCGGAATTGGAAAGCTGA
ACCAGATGCCCCTTCTAGGAGCTCACCCCTGGACACTCACTTCCCTAAACCAAAGAAGAAGCAAAAGGAC
CCACATTTCACGTACCCTGGTTGCCCAGATCCCACATCATCCTCTCAGGTCCCAGTCTCTGAGAATAACC
CGGAAGAACTCCACTATGCTGCTCTCAACTTCTCCCGCCTGAGACTGCAGGAGACCCAGGATCCCCAAGA
CACCTATTCTGATTACACAGAGGTCAGAGTCCAC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

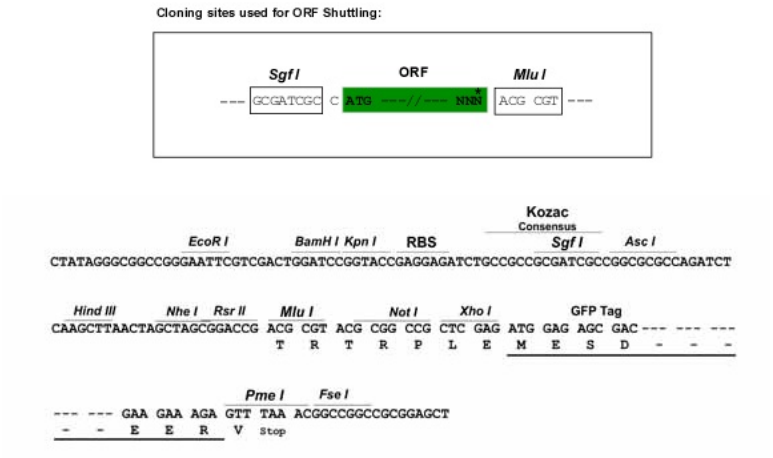
>MG227607 representing NM_172900
Red=Cloning site Green=Tags(s)

MSLLLFLLSFLLDGPQGQMESYFLQVQRIVKAQEGLCIFVPCSFSSPEGKWLNRSPLYGYWFKGIRKPSL
SFPVATNNKDKVLEWEARGRFQLLGDISKKNCSLLIKDVQWGDSTNYFFRMERGFERFSFKEEFRLQVEA
LTQKPDIFIPEVLEPGEPVTVVCLFSWTFNQCPAPSFSWMGDAVSFQESRPHTSNYSVLSFIPGLQHHDT
ELTCQLDFSRMSTQRTVRLRVAYAPRSLAISIFHDNVSVPDLHENPSHLEVQQGQSLRLLCTADSQPPAT
LSWVLEDQVLSWSSPVGSRTLALELPWVKAGDSGHYTCQAENRLGSQQHTLDLSVLYPPQDLRVTVSQAN
RTVLEILRNAISLPVLEGQSLCLVCVTYSNPPANVSWAWVTQTLIPIQSSEPGVLELPLVQREHEGEFTC
AAQNPLGAQRISLSLSVHYPPQMSSPSCSWEAKGLHCNCSSRAWPAPSLRWRLGEGLLEGNSSNASFTVT
FSSLGPWVNSSLSLLQELGPSLWLSCESWNTHGAQTTSVLLLPDKDSATAFSKGAVLGFGITALLALCLI
VVIVKTLQKKGTQEEPSRPKLSRGSTILDYINVVPKTRSLARNWKAEPDAPSRSSPLDTHFPKPKKKQKD
PHFTYPGCPDPTSSSQVPVSENNPEELHYAALNFSRLRLQETQDPQDTYSDYTEVRVH

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_172900

ORF Size: 2064 bp

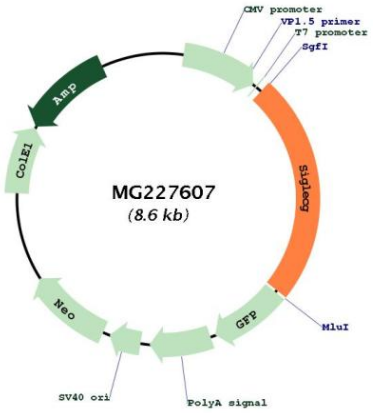
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_172900.3, NP_766488.2
RefSeq Size:	2484 bp
RefSeq ORF:	2067 bp
Locus ID:	243958
UniProt ID:	Q80ZE3
Cytogenetics:	7 B3
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]

Product images:



Circular map for MG227607