

Product datasheet for **RG222380**

SIRP alpha (SIRPA) (NM_001040022) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	SIRP alpha (SIRPA) (NM_001040022) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	SIRP alpha
Synonyms:	BIT; CD172A; MFR; MYD-1; P84; PTPNS1; SHPS1; SIRP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG222380 representing NM_001040022
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGCCCGCCGCGCCCGCCCGCCCGCCCTCGGGCCGCTGCTCTGCCTGCTGCTCGCCGCGTCCTGCG
 CCTGGTCAGGAGTGGCGGGTGAGGAGGAGCTGCAGGTGATTACAGCCTGACAAGTCCGTATCAGTTGCAGC
 TGGAGAGTCGGCATTCTGCACTGCACTGTGACCTCCCTGATCCCTGTGGGGCCCATCCAGTGTTTCAGA
 GGAGCTGGACCAGCCCGGAATTAATCTACAATCAAAAAGAAGGCCACTTCCCCCGGTAACAACGTGTT
 CAGAGTCCACAAAGAGAGAAAACATGGACTTTTCCATCAGCATCAGTAACATCACCCAGCAGATGCCGG
 CACCTACTACTGTGTGAAGTCCGGAAAGGAGCCCTGACACGGAGTTAAGTCTGGAGCAGGCACTGAG
 CTGTCTGTGCGTGCCAAACCTCTGCCCCGTGGTATCGGGCCCTGCGGCGAGGGCCACACCTCAGCACA
 CAGTGAGCTTACCTGCGAGTCCACGGCTTCTACCCAGAGACATCACCTGAAATGGTTCAAAAATGG
 GAATGAGCTCTCAGACTTCCAGACCAACGTGGACCCCTAGGAGAGAGCGTGTCTACAGCATCCACAGC
 ACAGCCAAGGTGGTGCTGACCCGCGAGGACGTTCACTCTCAAGTCATCTGCGAGGTGGCCACGTACCT
 TGCAGGGGGACCTCTTCGTGGGACTGCCAATTGTCTGAGACCATCCGAGTTCCACCCACCTTGAGGTT
 TACTCAACAGCCCGTGAGGGCAGAGAACCAGGTGAATGTACCTGCCAGGTGAGGAAGTTTACCCCCAG
 AGACTACAGCTGACCTGGTTGGAGAATGGAAACGTGTCCCGGACAGAAACGGCCTCAACCGTTACAGAGA
 ACAAGGATGGTACCTACAACCTGGATGAGCTGGCTCCTGGTGAATGTATCTGCCACAGGGATGATGTGAA
 GCTCACCTGCCAGGTGGAGCATGACGGGCAGCCAGCGGTGAGCAAAAGCCATGACCTGAAGGTCTCAGCC
 CACCCGAAGGAGCAGGGCTCAAATACCGCCGCTGAGAACACTGGATCTAATGAACGGAACATCTATTG
 TGGTGGGTGTGGTGTGCACCTTCTGCTGGTGGCCCTACTGATGGCGGCCCTCTACCTCGTCCGAATCAGACA
 GAAGAAAAGCCCGAGGGCTCCACTTCTTCTACAAGTTGCATGAGCCCGAGAAGAATGCCAGAGAAATAACA
 CAGGACACAAATGATATCACATATGCAGACCTGAACCTGCCCAAGGGGAAGAAGCCTGCTCCCCAGGCTG
 CGGAGCCCAACAACCACCGAGTATGCCAGCATTAGACCCAGCCCGAGCCCGCGTGGAGGACACCTT
 CACCTATGCTGACCTGGACATGGTCCACCTCAACCGGACCCCAAGCAGCCGGCCCCCAAGCCTGAGCCG
 TCCTTCTCAGAGTACGCCAGCGTCCAGGTCCCGAGGAAG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG222380 representing NM_001040022
 Red=Cloning site Green=Tags(s)

MEPAGPAPGRLGPLLLCLLLAASCAWSGVAGEEELQVIQPKSVSVAAGESAILHCTVTSIPVGPPIQWFR
 GAGPARELIYNQKEGHFPRVTTVSESTKRENMDFSISISNITPADAGTYCVKFRKGSPDTEFKSGAGTE
 LSVRAKPSAPVVS GPAARATPQHTVSFTCESHGFSRPDITLKWFKNGNELSDFQTNVDPVGESVSYSIHS
 TAKVVLTRDVDHSQVICEVAHVTLQGDPLRGATNLSETIRVPPTLEVTTQQPVRAENQVNVTCQVRKFYPQ
 RLQLTWLENGVSRTEASTVTENKDGTYNWSWLLVNVSAHRDDVKLTQVEHMQPVAVSKSHDLKVSA
 HPKEQGSNTAENTGSNERNIYIVVGVVCTLLVALLMAALYLVRIRQKKAQGSTSSTRLHEPEKNAREIT
 QDNDITYADLNLPGKKPAPQAAEPNNHTEYASIQTSQPASEDTLTYADLDMVHLNRPKQPAKPEP
 SFSEYASVQVPRK

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001040022

ORF Size: 1509 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_001040022.1](#), [NP_001035111.1](#)

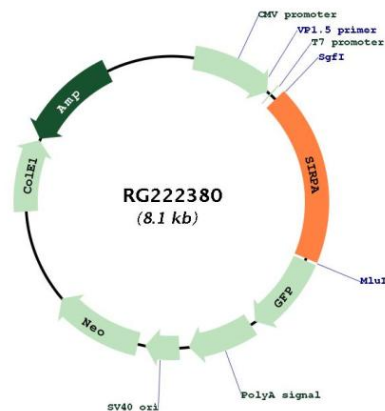
RefSeq Size: 4201 bp

RefSeq ORF: 1515 bp

Locus ID: 140885

UniProt ID:	P78324
Cytogenetics:	20p13
Protein Families:	Druggable Genome, Phosphatase, Transmembrane
Gene Summary:	The protein encoded by this gene is a member of the signal-regulatory-protein (SIRP) family, and also belongs to the immunoglobulin superfamily. SIRP family members are receptor-type transmembrane glycoproteins known to be involved in the negative regulation of receptor tyrosine kinase-coupled signaling processes. This protein can be phosphorylated by tyrosine kinases. The phospho-tyrosine residues of this PTP have been shown to recruit SH2 domain containing tyrosine phosphatases (PTP), and serve as substrates of PTPs. This protein was found to participate in signal transduction mediated by various growth factor receptors. CD47 has been demonstrated to be a ligand for this receptor protein. This gene and its product share very high similarity with several other members of the SIRP family. These related genes are located in close proximity to each other on chromosome 20p13. Multiple alternatively spliced transcript variants have been determined for this gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG222380