

# **Product datasheet for SC311081**

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## SIRP alpha (SIRPA) (NM 001040023) Human Untagged Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: SIRP alpha (SIRPA) (NM\_001040023) Human Untagged Clone

Tag: Tag Free
Symbol: SIRP alpha

Synonyms: BIT; CD172A; MFR; MYD-1; P84; PTPNS1; SHPS1; SIRP

Mammalian Cell

Selection:

None

Vector: pCMV6-XL4

E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene ORF sequence for NM\_001040023 edited

ATGGAGCCCGCCGGCCCCGGCCGCCTCGGGCCGCTGCTCTGCCTGCTCGCC GCGTCCTGCGCCTGGTCAGGAGTGGCGGGTGAGGAGGAGCTGCAGGTGATTCAGCCTGAC AAGTCCGTGTTGGTTGCAGCTGGAGAGACAGCCACTCTGCGCTGCACTGCGACCTCTCTG ATCCCTGTGGGGCCCATCCAGTGGTTCAGAGGAGCTGGACCAGGCCGGGAATTAATCTAC AATCAAAAAGAAGGCCACTTCCCCCGGGTAACAACTGTTTCAGACCTCACAAAGAGAAAC AACATGGACTTTTCCATCCGCATCGGTAACATCACCCCAGCAGATGCCGGCACCTACTAC TGTGTGAAGTTCCGGAAAGGGAGCCCCGATGACGTGGAGTTTAAGTCTGGAGCAGGCACT GAGCTGTCTGTGCGCCCAAACCCTCTGCCCCCGTGGTATCGGGCCCTGCGGCGAGGGCC ACACCTCAGCACACAGTGAGCTTCACCTGCGAGTCCCACGGCTTCTCACCCAGAGACATC ACCCTGAAATGGTTCAAAAATGGGAATGAGCTCTCAGACTTCCAGACCAACGTGGACCCC GTAGGAGAGAGCGTGTCCTACAGCATCCACAGCACAGCCAAGGTGGTGCTGACCCGCGAG GACGTTCACTCTCAAGTCATCTGCGAGGTGGCCCACGTCACCTTGCAGGGGGACCCTCTT CAGCCCGTGAGGGCAGAGAACCAGGTGAATGTCACCTGCCAGGTGAGGAAGTTCTACCCC CAGAGACTACAGCTGACCTGGTTGGAGAATGGAAACGTGTCCCGGACAGAAACGGCCTCA ACCGTTACAGAGAACAAGGATGGTACCTACAACTGGATGAGCTGGCTCCTGGTGAATGTA GTCAGCAAAAGCCATGACCTGAAGGTCTCAGCCCACCCGAAGGAGCAGGGCTCAAATACC GCCCAGGGCTCCACTTCTTCTACAAGGTTGCATGAGCCCGAGAAAATACCCAGAGAAATA ACACAGGACACAAATGATATCACATATGCAGACCTGAACCTGCCCAAGGGGAAGAAGCCT GCTCCCCAGGCTGCGGAGCCCAACAACCACACGGAGTATGCCAGCATTCAGACCAGCCCG CAGCCCGCGTCGGAGGACACCCTCACCTATGCTGACCTGGACATGGTCCACCTCAACCGG ACCCCAAGCAGCCGGCCCCAAGCCTGAGCCGTCCTTCTCAGAGTACGCCAGCGTCCAG GTCCCGAGGAAGTGA

### SIRP alpha (SIRPA) (NM\_001040023) Human Untagged Clone - SC311081

**Restriction Sites:** Please inquire ACCN: NM\_001040023

**Insert Size:** 2300 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

**OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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: <u>NM 001040023.1</u>, <u>NP 001035112.1</u>

 RefSeq Size:
 4109 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] Transcript Variant: This variant (2) differs in the 5' UTR and uses an alternate, in-frame, splice donor site in the 3' coding region compared to variant 4. This variant encodes a shorter protein (isoform 1) compared to isoform 2. Variants 1, 2, and 3 encode the same protein (isoform 1).