

## Signal-Regulatory Protein alpha-1/SIRPA/CD172a) Biotinylated Active Protein | SIRPA/CD172a active protein

Recombinant Human Signal-Regulatory Protein alpha-1/SIRPA/CD172a (C-6His-Avi) Biotinylated

|                               |                            |
|-------------------------------|----------------------------|
| CATALOG #<br><b>AAA177937</b> | HOST<br><b>Human Cells</b> |
|-------------------------------|----------------------------|

### PRODUCT SYNONYMS

Signal-Regulatory Protein alpha-1/SIRPA/CD172a) Biotinylated; Recombinant Human Signal-Regulatory Protein alpha-1/SIRPA/CD172a (C-6His-Avi) Biotinylated; Tyrosine-Protein Phosphatase Non-Receptor Type Substrate 1; SHP Substrate 1; SHPS-1; Brain Ig-Like Molecule with Tyrosine-Based Activation Motifs; Bit; CD172 Antigen-Like Family Member A; Inhibitory Feceptor SHPS-1; Macrophage Fusion Receptor; MyD-1 Antigen; Signal-Regulatory Protein Alpha-1; Sirp-Alpha-1; Signal-Regulatory Protein Alpha-2; Sirp-Alpha-2; Signal-Regulatory Protein Alpha-3; Sirp-Alpha-3; p84; CD172a; SIRPA; BIT; MFR; MYD1; PTPNS1; SHPS1; SIRP; SIRPA/CD172a active protein

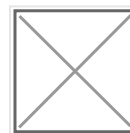
### PRODUCT SPECIFICATIONS

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| Host                    | Human Cells                                                                                                                                                                                                                                                                                                                                   |
| Purity/Purification     | >95% as determined by reducing SDS-PAGE                                                                                                                                                                                                                                                                                                       |
| Form/Format             | Lyophilized from a 0.2um filtered solution of 20mM PB, 150mM NaCl, pH7.2.                                                                                                                                                                                                                                                                     |
| Sequence                | Glu31-Arg3 70                                                                                                                                                                                                                                                                                                                                 |
| Species                 | Human                                                                                                                                                                                                                                                                                                                                         |
| Tag                     | C-6His-Avi                                                                                                                                                                                                                                                                                                                                    |
| Endotoxin               | <1.0EU per ug as determined by the LAL method.                                                                                                                                                                                                                                                                                                |
| Protein Construction    | Biotinylated Recombinant Human Signal-Regulatory Protein Alpha 1 is produced by our Mammalian expression system and the target gene encoding Glu31-Arg370 is expressed with a 6His, Avi tag at the C-terminus.                                                                                                                                |
| Activity                | Immobilized Human SIRPA-His-Avi at 10ug/ml (100ul/well) can bind Human CD47-Fc . The ED50 of Human CD47-Fc is 898ng/ml.                                                                                                                                                                                                                       |
| Preparation and Storage | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 degree C. Reconstituted protein solution can be stored at 4-8 degree C for 2-7 days. Aliquots of reconstituted samples are stable at < -20 degree C for 3 months.<br>This product is provided as lyophilized powder which is shipped with ice packs. |

### IMAGES



Bioactivity



SDS-PAGE

ADDITIONAL INFORMATION

|                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for SIRPA/CD172a active protein | Signal Regulatory Protein alpha (SIRPalph) is a monomeric approximately 90 kD type I transmembrane glycoprotein. The 504 amino acid human SIRPalph contains two Ig-like C1-type domains and one Ig-like V-type domain. SIRPalph can express in various tissues, mainly on brain and myeloid cells, including macrophages, neutrophils, dendritic and Langerhans cells. It also can detect in neurons, smooth muscle and endothelial cells. SIRPA is an immunoglobulin-like cell surface receptor for CD47. SIRPalph acts as docking protein and induces translocation of PTPN6, PTPN11 and other binding partners from the cytosol to the plasma membrane. SIRPalph shows adhesion of cerebellar neurons, neurite outgrowth and glial cell attachment. SIRPalph engagement generally produces a negative regulatory signal; it may mediate negative regulation of phagocytosis, mast cell activation and dendritic cell activation. |
| Product Categories/Family for SIRPA/CD172a active protein   | Signal Transduction; Cardiovascular; Neuroscience                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                                                                                                                                                                                 |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 91105764                                                                                                                                                                                                                                                        |
| NCBI GeneID                      | 140885                                                                                                                                                                                                                                                          |
| NCBI Accession #                 | NP_001035111.1                                                                                                                                                                                                                                                  |
| NCBI GenBank Nucleotide #        | NM_001040022.1                                                                                                                                                                                                                                                  |
| UniProt Accession #              | P78324; O00683; O43799; Q8N517; Q8TAL8; Q9H0Z2; Q9UDX2; Q9UIJ6; Q9Y4U9; A2A2E1; A8K411; B2R6C3                                                                                                                                                                  |
| Molecular Weight                 | 54,967 Da                                                                                                                                                                                                                                                       |
| NCBI Official Full Name          | tyrosine-protein phosphatase non-receptor type substrate 1                                                                                                                                                                                                      |
| NCBI Official Synonym Full Names | signal-regulatory protein alpha                                                                                                                                                                                                                                 |
| NCBI Official Symbol             | SIRPA                                                                                                                                                                                                                                                           |
| NCBI Official Synonym Symbols    | BIT; MFR; P84; SIRP; MYD-1; SHPS1; CD172A; PTPNS1                                                                                                                                                                                                               |
| NCBI Protein Information         | tyrosine-protein phosphatase non-receptor type substrate 1; myd-1 antigen; inhibitory receptor SHPS-1; macrophage fusion receptor; CD172 antigen-like family member A; tyrosine phosphatase SHP substrate 1; brain-immunoglobulin-like molecule with tyrosine-b |
| UniProt Protein Name             | Tyrosine-protein phosphatase non-receptor type substrate 1                                                                                                                                                                                                      |
| UniProt Gene Name                | SIRPA                                                                                                                                                                                                                                                           |
| UniProt Synonym Gene Names       | BIT; MFR; MYD1; PTPNS1; SHPS1; SIRP; SHP substrate 1; SHPS-1; Bit; Sirp-alpha-1; Sirp-alpha-2                                                                                                                                                                   |
| UniProt Entry Name               | SHPS1_HUMAN                                                                                                                                                                                                                                                     |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/human-cells-active-protein/signal-regulatory-protein-alpha-1-sirpa-cd172a-biotinylated/177937>