

Tyrosine-protein phosphatase non-receptor type substrate 1 (SIRPA) Active Protein | SIRPA active protein

Recombinant Human Tyrosine-protein phosphatase non-receptor type substrate 1 (SIRPA), partial (Active)

CATALOG # AAA279225	HOST Mammalian cell
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PRODUCT SYNONYMS

Tyrosine-protein phosphatase non-receptor type substrate 1 (SIRPA); Recombinant Human Tyrosine-protein phosphatase non-receptor type substrate 1 (SIRPA); partial (Active); Brain Ig-like molecule with tyrosine-based activation motifs; Bit; CD172 antigen-like family member A; Inhibitory receptor 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; CD_antigen: CD172a; SHP substrate 1; SHPS-1; BIT; MFR; MYD1; PTPNS1; SHPS1; SIRP; SIRPA active protein

PRODUCT SPECIFICATIONS

Host	Mammalian cell
Purity/Purification	Greater than 95% as determined by SDS-PAGE.
Form/Format	Lyophilized powder Lyophilized from a 0.2 um filtered 20 mM Tris-HCl, 0.5 M NaCl, 6% Trehalose, pH 8.0
Sequence Positions	31-370aa; Partial
Sequence	EEELQVIQPD KSVLVAAGET ATLRCATSL IPVGPIQWFR GAGPGRELIY NQKEGHFPRV TTVSDLTKRN NMDFSIRIGN ITPADAGTYY CVKFRKGSPD DVEFKSGAGT ELSVRAKPSA PVS SGPAARA TPQHTVSFTC ESHGFSRPDI TLKWFKNONE LSDFQTNVDP VGESVSYSIH STAKVLTRE DVHSQVICEV AHVTLQGDPL RGTANLSETI RVPPTLEVTQ QPVRAENQVN VTCQVRKFYP QRLQLTWLEN GNVSRTEAS TVTENKDGTY NWMSWLLVNV SAHRDDVKLT CQVEHDGQPA VSKSHDLKVS AHPKEQGSNT AAENTGSNER \$
Species	Homo sapiens (Human)
Tag	C-terminal 6xHis-Myc-tagged
Endotoxin	Less than 1.0 EU/ug as determined by LAL method.
Research Area	Cancer
Biological Activity	1. Measured by its binding ability in a functional ELISA. Immobilized SIRPA at 2 ug/ml can bind human CD47, the EC50 of human SIRPA protein is 58.30-85.04 ng/ml. 2. Human SIRPA protein His/Myc tag captured on COOH chip can bind Human CD47 protein Fc tag with an affinity constant of 19.1 nM as detected by LSPR Assay.
Preparation and Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20 degree C/-80 degree C. The shelf life of lyophilized form is 12 months at -20 degree C/-80 degree C. Repeated freezing and thawing is not recommended. Store working aliquots at 4 degree C for up to one week. We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20 degree C/-80 degree C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

IMAGES



Application Data

Human SIRPA protein His/Myc tag captured on COOH chip can bind Human CD47 protein Fc tag with an affinity constant of 19.1 nM as detected by LSPR Assay.



Bioactivity

Measured by its binding ability in a functional ELISA. Immobilized SIRPA at 2 ?g/ml can bind human CD47, the EC50 of human SIRPA protein is 58.30-85.04 ng/ml.



SDS-PAGE

Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

ADDITIONAL INFORMATION

Related Product Information for SIRPA active protein	Immunoglobulin-like cell surface receptor for CD47. Acts as docking protein and induces translocation of PTPN6, PTPN11 and other binding partners from the cytosol to the plasma membrane. Supports adhesion of cerebellar neurons, neurite outgrowth and glial cell attachment. May play a key role in intracellular signaling during synaptogenesis and in synaptic function. Involved in the negative regulation of receptor tyrosine kinase-coupled cellular responses induced by cell adhesion, growth factors or insulin. Mediates negative regulation of phagocytosis, mast cell activation and dendritic cell activation. CD47 binding prevents maturation of immature dendritic cells and inhibits cytokine production by mature dendritic cells.
Product Categories/Family for SIRPA active protein	Active Protein & In Stock Protein

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/mammalian-cell-active-protein/tyrosine-protein-phosphatase-non-receptor-type-substrate-1-sirpa/279225>