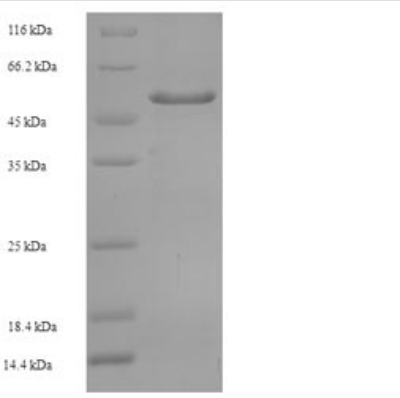
Recombinant Human Tyrosine-protein phosphatase non-receptor type substrate 1 (SIRPA), partial

Product Code	CSB-EP021334HU1
Relevance	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 mbrane. 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.
Abbreviation	Recombinant Human SIRPA protein, partial
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°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P78324
Alias	Brain Ig-like molecule with tyrosine-based activation motifs ;BitCD172 antigen-like family member AInhibitory receptor SHPS-1Macrophage fusion receptorMyD-1 antigen;Signal-regulatory protein alpha-1 ;Sirp-alpha-1Signal-regulatory protein alpha-2 ;Sirp-alpha-2Signal-regulatory protein alpha-3 ;Sirp-alpha-3p84; CD172a
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	EEELQVIQPDKSVSVAAGEEELQVIQPDKSVSVAAGESAILHCTVTSLIPVGPIQ WFRGAGPARELIYNQKEGHFPRVTTVSESTKRENMDFSISISNITPADAGTYYC VKFRKGSPDTEFKSGAGTELSVRAKPSAPVVSGPAARATPQHTVSFTCESHG FSPRDITLKWFKNGNELSDFQTNVDPVGESVSYSIHSTAKVVLTREDVHSQVIC EVAHVTLQGDPLRGTANLSETIRVPPTLEVTQQPVRAENQVNVTCQVRKFYPQ RLQLTWLENGNVSRTETASTVTENKDGTYNWMSWLLVNVSAHRDDVKLTCQ VEHDGQPAVSKSHDLKVSAHPKEQGSNTAAENTGSNERNIY
Research Area	Cardiovascular
Source	E.coli
Target Names	SIRPA
Expression Region	31-373aa

Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	53.7kDa
Protein Length	Partial of BC026692

Image



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

Description

The production of the recombinant Human SIRPA protein begins with the creation of the recombinant plasmid, which is synthesized by inserting the gene encoding the Human SIRPA protein (31-373aa) into a plasmid vector. The recombinant plasmid is introduced into e.coli cells. e.coli cells that can survive in the presence of a specific antibiotic are selected and then cultured under conditions conducive to the expression of the gene of interest. The protein is equipped with a N-terminal 6xHis-SUMO tag. Following expression, the recombinant SIRPA protein is isolated and purified from the cell lysate using affinity purification. Denaturing SDS-PAGE is then employed to resolve the resulting recombinant Human SIRPA protein, demonstrating a purity exceeding 90%.

Reconstitution

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°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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