

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

Catalog No. PKSH033882

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

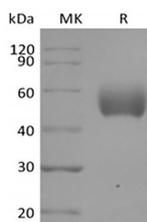
### Description

<b>Synonyms</b>	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
<b>Species</b>	Human
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Glu31-Arg370
<b>Accession</b>	P78324
<b>Calculated Molecular Weight</b>	38.1 kDa
<b>Observed molecular weight</b>	45-60 kDa
<b>Tag</b>	C-His
<b>Bioactivity</b>	Loaded Anti-Human SIRPA mAb-Fc on Protein A Biosensor, can bind Human SIRPA-His with an affinity constant of 1.22 nM as determined in BLI assay.

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.2. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### For Research Use Only

## Background

Signal Regulatory Protein  $\alpha$  (SIRP $\alpha$ ) is a monomeric approximately 90 kD type I transmembrane glycoprotein. The 504 amino acid human SIRP $\alpha$  contains two Ig-like C1-type domains and one Ig-like V-type domain. SIRP $\alpha$  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. SIRP $\alpha$  acts as docking protein and induces translocation of PTPN6, PTPN11 and other binding partners from the cytosol to the plasma membrane. SIRP $\alpha$  shows adhesion of cerebellar neurons, neurite outgrowth and glial cell attachment. SIRP $\alpha$  engagement generally produces a negative regulatory signal; it may mediate negative regulation of phagocytosis, mast cell activation and dendritic cell activation