

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

Catalog Number: PKSH033867

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

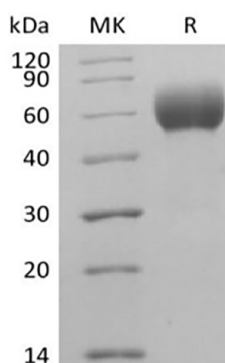
### Description

<b>Species</b>	Human
<b>Source</b>	HEK293 Cells-derived Human SIRPA;CD172a protein Glu31-Arg370, with an C-terminal His & Avi
<b>Calculated MW</b>	39.9 kDa
<b>Observed MW</b>	50-80 kDa
<b>Accession</b>	P78324
<b>Bio-activity</b>	Loaded Anti-Human SIRPA mAb-Fc on Protein A Biosensor, can bind Biotinylated Human SIRPA-His with an affinity constant of 5.57 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.

### 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. SIRP $\alpha$  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.