

## Recombinant Human SIRPalpha/CD172a protein (His Tag)

**Catalog Number:** PDEH101043

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

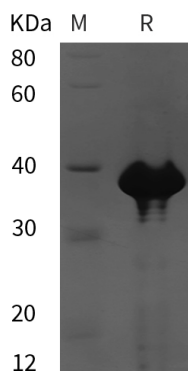
### Description

<b>Species</b>	Human
<b>Source</b>	E.coli-derived Human SIRPA protein Glu31-Ser350, with an N-terminal His & C-terminal His
<b>Calculated MW</b>	35.1 kDa
<b>Observed MW</b>	39 kDa
<b>Accession</b>	P78324-2
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95% as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 10 EU/mg 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 in PBS with 5% Trehalose and 5% Mannitol.
<b>Reconstitution</b>	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

### 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. 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

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