



# Recombinant Protein Technical Manual

## Recombinant Mouse SIRPA/CD172a Protein (His Tag)

RPES2952

### Product Data:

**Product SKU:** RPES2952

**Size:** 10µg

**Species:** Mouse

**Expression host:** Human Cells

**Uniprot:** Q6P6I8

### Protein Information:

**Molecular Mass:** 38.7 kDa

**AP Molecular Mass:** 6010 kDa

**Tag:** C-6His

**Bio-activity:**

**Purity:** > 95 % as determined by SDS-PAGE

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** 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.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from a 0.2 µm filtered solution of PBS, pH7.4.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Tyrosine-Protein Phosphatase Non-Receptor Type Substrate 1; SHP Substrate 1; Brain Ig-Like Molecule with Tyrosine-Based Activation Motifs; CD172 Antigen-Like Family Member A; Inhibitory Feceptor SHPS; Macrophage Fusion Receptor; Signal-Regulatory Protein Alpha; Sirp-Alpha; Signal-Regulatory Protein Alpha-2; Sirp-Alpha-2; Signal-Regulatory Protein Alpha-3; Sirp-Alpha-3; CD172a; SIRPA; MFR; SHPS1; SIRP

## Immunogen Information:

**Sequence:** Lys32-Asn372

## Background:

Mouse Signal Regulatory Protein  $\alpha$  (SIRP $\alpha$ ) is a type I transmembrane glycoprotein. It contains two Ig-like C1-type domains and one Ig-like V-type domain. Mouse SIRP alpha ECD shares 61%, 75%, 62%, 61%, and 59% aa sequence identity with human, rat, equine, bovine, and porcine SIRP alpha, respectively. 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