

**Product Data:****Product SKU:** RPES5048**Size:** 10µg**Species:** Human**Expression host:** Human Cells**Uniprot:** P78324**Protein Information:****Molecular Mass:** 64.1 kDa**AP Molecular Mass:** 8505 kDa**Tag:** C-Fc**Bio-activity:****Purity:** > 95 % as determined by reducing 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; SHPS; Brain Ig-Like Molecule with Tyrosine-Based Activation Motifs; Bit; CD172 Antigen-Like Family Member A; Inhibitory Feceptor SHPS; Macrophage Fusion Receptor; MyD Antigen; Signal-Regulatory Protein Alpha; Sirp-Alpha; 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

## Immunogen Information:

**Sequence:** Glu31-Arg370

## 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