



Recombinant Protein Technical Manual

**Recombinant Mouse SIRPA/CD172a Protein
(MIgG2a Tag)**
RPES2991

Product Data:

Product SKU: RPES2991

Size: 10µg

Species: Mouse

Expression host: Human Cells

Uniprot: Q6P6I8

Protein Information:

Molecular Mass: 65.1 kDa

AP Molecular Mass: 9020kDa

Tag: C-MIgG2a

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; CD172 Antigen-Like Family Member A; Signal-Regulatory Protein Alpha; CD172a; SIRPA; MFR; SHPS1; SIRP

Immunogen Information:

Sequence: Lys32-Asn372

Background:

SIRP α 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 α 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 α acts as docking protein and induces translocation of PTPN6, PTPN11 and other binding partners from the cytosol to the plasma membrane. SIRP α shows adhesion of cerebellar neurons, neurite outgrowth and glial cell attachment. SIRP α engagement generally produces a negative regulatory signal; it may mediate negative regulation of phagocytosis, mast cell activation and dendritic cell activation.