

## Recombinant Mouse SIRPA (C-6His) Catalog No: CS12

Description Recombinant Mouse Signal-Regulatory Protein Alpha 1 is produced by our Mammalian expression

system and the target gene encoding Lys32-Asn373 is expressed with a 6His tag at the C-terminus.

Source Human Cells

Alternative name Tyrosine-Protein Phosphatase Non-Receptor Type Substrate 1; SHP Substrate 1; Brain Iq-Like

Molecule with Tyrosine-Based Activation Motifs; CD172 Antigen-Like Family Member A; Inhibitory Feceptor SHPS-1; Macrophage Fusion Receptor; Signal-Regulatory Protein Alpha-1; Sirp-Alpha-1; Signal-Regulatory Protein Alpha-2; Sirp-Alpha-2; Signal-Regulatory Protein Alpha-3; Sirp-Alpha-3;

CD172a; SIRPA; MFR; SHPS1; SIRP

Accession No. Q6P6I8

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

Quality Control Purity: Greater than 95% as determined by reducing SDS-PAGE.

Endotoxin: Less than 0.1 ng/μg (1 IEU/μg) as determined by LAL test.

**Shipping** The product is shipped at ambient temperature.

Upon receipt, store it immediately at the temperature listed below.

Storage Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks.

Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

 $\textbf{Background} \qquad \qquad \textbf{Mouse Signal Regulatory Protein } \alpha \ (\textbf{SIRP}\alpha) \ \text{is a type I transmembrane glycoprotein.} \textbf{It contains two Ig-}$ 

like C1-type domains and one Ig-like V-type domain. Mouse SIRP alpha ECD shares 61%, 75%, 62%, 61%, and 59% as 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

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