

Recombinant Mouse SIRPA/CD172a Protein (MIgG2a Tag)

Catalog No. PKSM041146

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

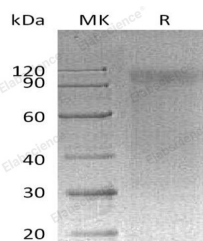
Description

Synonyms	Tyrosine-Protein Phosphatase Non-Receptor Type Substrate 1;CD172 Antigen-Like Family Member A;Signal-Regulatory Protein Alpha-1;CD172a;SIRPA;MFR;SHPS1;SIRP
Species	Mouse
Expression Host	HEK293 Cells
Sequence	Lys32-Asn372
Accession	Q6P6I8
Calculated Molecular Weight	65.1 kDa
Observed molecular weight	90-120 kDa
Tag	C-mIgG2a Fc
Bioactivity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	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.
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, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

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. SIRP α 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.