Recombinant Human Signal-Regulatory Protein alpha-1/SIRPA/CD172a (C-6His)

Catalog Number: PKSH033882

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

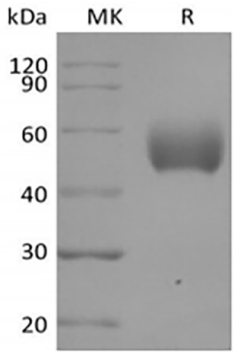
Description

Species	Human
Source	HEK293 Cells-derived Human SIRPA;CD172a protein Glu31-Arg370, with an C-terminal His
Calculated MW	38.1 kDa
Observed MW	45-60 kDa
Accession	P78324
Bio-activity	Loaded Anti-Human SIRPA mAb-Fc on Protein A Biosensor, can bind Human SIRPA-His with an affinity constant of 1.22 nM as determined in BLI assay.

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 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ 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 20mM PB, 150mM NaCl, pH 7.2. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 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

Signal Regulatory Protein α (SIRPα) is a monomeric approximately 90 kD type I transmembrane glycoprotein. The 504 amino acid human SIRPα contains two Ig-like C1-type domains and one Ig-like V-type domain. SIRPα 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. SIRPα acts as docking protein and induces translocation of PTPN6, PTPN11 and other binding partners from the cytosol to the plasma membrane. SIRPα shows adhesion of cerebellar neurons, neurite outgrowth and glial cell attachment. SIRPα engagement generally produces a negative regulatory signal; it may mediate negative regulation of phagocytosis, mast cell activation and dendritic cell activation