Elabscience®

Recombinant Human CD172a/SIRPA Protein (His Tag)

Catalog Number: PKSH033525

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

Description		
Species	Human	
Source	HEK293 Cells-derived Human CD172a/SIRPA protein Glu31-Arg370, with an C-	
	terminal His	
Calculated MW	38.3 kDa	
Observed MW	45-65 kDa	
Accession	CAA71403.1	
Bio-activity	Loaded Anti-Human SIRPA mAb-Fc on Protein A Biosensor, can bind Human SIRI	
	His with an affinity constant of 10.1 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	
	°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% 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

kDa	MK	R
120 90 60	-	-
40		-
30		
20		really
14		

> 95 % as determined by reducing SDS-PAGE.

Background

Elabscience®

Signal Regulatory Protein α (SIRP α) is a monomeric approximately 90 kD type I transmembrane glycoprotein. The 504 amino acid human SIRP α contains two Ig-like C1-type domains and one Ig-like V-type domain. 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