Recombinant Mouse CD172a/SIRPA Protein (His Tag)

Catalog Number: PKSM040419

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

Description		
Species	Mouse	
Source	HEK293 Cells-derived Mouse CD172a/SIRPA protein Met 1-Asn 373, with an C-	
	terminal His	
Calculated MW	39.4 kDa	
Observed MW	50-70 kDa	
Accession	BAA20376.1	
Bio-activity	Measured by its binding ability in a functional ELISA. Immobilized mouse SIRPA-His	
	at 10 μ g/ml (100 μ l/well) can bind human CD47-Fc, The EC ₅₀ of human CD47-Fcis	
	0.05-0.13 µg/ml.	
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 $< -20^{\circ}$ C for 3 months.	
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.	
Formulation	Lyophilized from sterile 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		
K	Da M	

KDa	М	
116	-	
66.2	-	
45.0	-	
35.0	-	
25.0	-	
18.4 14.4	=	

> 95 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

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Tyrosine-protein phosphatase non-receptor type substrate 1, also known as SHP substrate 1, Inhibitory receptor SHPS-1, Brain Ig-like molecule with tyrosine-based activation motifs, Macrophage fusion receptor, CD172 antigen-like family member A, SIRPA and CD172a, is a single-pass type I membrane protein which contains two Ig-like C1-type (immunoglobulin-like) domains and one Ig-like V-type (immunoglobulin-like) domain. SIRPA is ubiquitously expressed. It is highly expressed in brain and detected at lower levels in heart, placenta, lung, testis, ovary, colon, liver, small intestine, prostate, spleen, kidney, skeletal muscle and pancreas. It is also detected on myeloid cells, but not T-cells. SIRPA is an immunoglobulin-like cell surface receptor for CD47. SIRPA acts as docking protein and induces translocation of PTPN6, PTPN11 and other binding partners from the cytosol to the plasma membrane. SIRPA supports adhesion of cerebellar neurons, neurite outgrowth and glial cell attachment. It may play a key role in intracellular signaling during synaptogenesis and in synaptic function. SIRPA is involved in the negative regulation of receptor tyrosine kinasecoupled cellular responses induced by cell adhesion, growth factors or insulin. It mediates negative regulation of phagocytosis, mast cell activation and dendritic cell activation.