

Recombinant Rat Sirpa Protein, C-hFc-tagged

Product Information

Cat IMP-1323

Official Symbol Sirpa

Product Overview Recombinant rat SIRPA (BAA20368.1) (Met1-Asn373) was expressed with

the Fc region of human IgG1 at the C-terminus.

DescriptionTyrosine-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.

Expression System HEK293

Species Rat

Tag C-hFc

Predicted N Terminal 32 Lys

Form Lyophilized from sterile PBS, pH 7.4, 5 % trehalose, 5% mannitol and

0.01% Tween80.

Molecular Mass The recombinant rat SIRPA consists of 580 amino acids and predicts a

molecular mass of 64.25 kDa.

Protein length Met1-Asn373

Endotoxin < 1.0 EU/μg protein as determined by the LAL method.

Purity > 95 % as determined by SDS-PAGE.

Storage Samples are stable for up to twelve months from date of receipt at -20 to



-80 centigrade. Store it under sterile conditions at -20 to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.

KDa M 116 66.2 45.0 35.0 25.0

Reconstitution

SDS-PAGE