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Anti-SIRPa / CD172a Reference Antibody (Hospital for Sick Children patent anti-SIRPA)

Recombinant Antibody
Catalog # APR10259

Product Information

Application	FC, Kinetics, Animal Model
Primary Accession	P78324
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG4
Calculated MW	54967

Additional Information

Target/Specificity	SIRPa / CD172a
Endotoxin Conjugation	Unconjugated
Expression system	CHO Cell
Format	Purified monoclonal antibody supplied in PBS, pH6.0, without preservative.This antibody is purified through a protein A column.

Protein Information

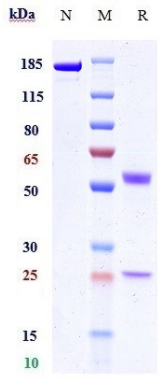
Name	SIRPA
Synonyms	BIT, MFR, MYD1, PTPNS1, SHPS1, SIRP
Function	Immunoglobulin-like cell surface receptor for CD47. Acts as docking protein and induces translocation of PTPN6, PTPN11 and other binding partners from the cytosol to the plasma membrane. Supports adhesion of cerebellar neurons, neurite outgrowth and glial cell attachment. May play a key role in intracellular signaling during synaptogenesis and in synaptic function (By similarity). Involved in the negative regulation of receptor tyrosine kinase-coupled cellular responses induced by cell adhesion, growth factors or insulin. Mediates negative regulation of phagocytosis, mast cell activation and dendritic cell activation. CD47 binding prevents maturation of immature dendritic cells and inhibits cytokine production by mature dendritic cells. Plays a role in antiviral immunity and limits new world arenavirus infection by decreasing virus internalization (By similarity). Receptor for THBS1 (PubMed:24511121). Interaction with THBS1 stimulates phosphorylation of SIRPA (By similarity). In response to THBS1, involved in ROS signaling in non-phagocytic cells, stimulating NADPH oxidase-derived ROS production

(PubMed:24511121).

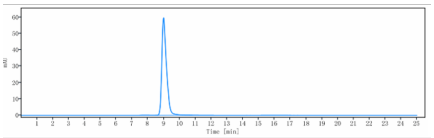
Cellular Location Membrane; Single-pass type I membrane protein.

Tissue Location Ubiquitous. Highly expressed in brain. Detected on myeloid cells, but not T-cells. Detected at lower levels in heart, placenta, lung, testis, ovary, colon, liver, small intestine, prostate, spleen, kidney, skeletal muscle and pancreas

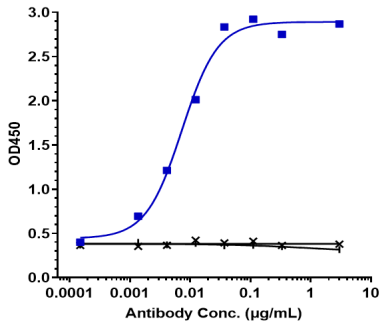
Images



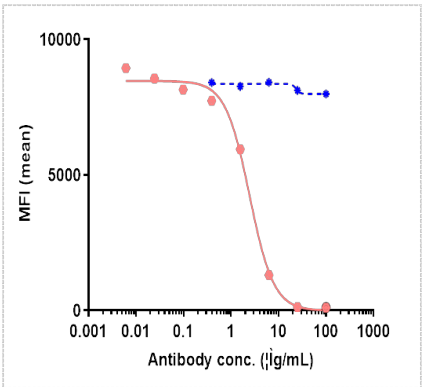
Anti-SIRPa / CD172a Reference Antibody (Hospital for Sick Children patent anti-SIRPA) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%



The purity of Anti-SIRPa / CD172a Reference Antibody (Hospital for Sick Children patent anti-SIRPA)is more than 95% ,determined by SEC-HPLC.



Immobilized human SIRPα V1 FC at4 μg/mL can bind Anti-SIRPa / CD172a Reference Antibody (Hospital for Sick Children patent anti-SIRPA),EC50=0.007292 μg/mL



Hospital for Sick Children patent anti-SIRPA FACS Blocking was evaluated using human CCRF-CEM cells. The IC50 was approximately 3.289 ug/ml. nM.