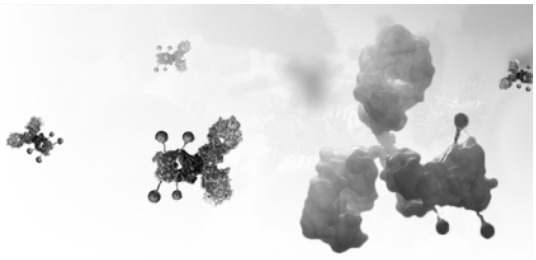

Mouse Anti-Human CD172a/b (SIRPα/β) Monoclonal Antibody, clone SE5A5 (CABT-L801M)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	Clone SE5A5 recognizes a common epitope on SIRPa (90 kD) and SIRPβ (50 kD). A high degree of homology has been found between SIRP family isoforms alpha and beta at the level of extracellular domains. Consequently, many anti SIRP antibody clones, such as SE5A5, have been reported to cross react with several SIRP isoforms. It reacts with CD172a and has weak cross-reaction with CD172b. This antibody is able to block the binding of SIRPa (SIRPa1 and SIRPa2) to CD47.
Immunogen	NIH-3T3/hu-SIRPα cell line
Isotype	IgG1, κ
Source/Host	Mouse
Species Reactivity	Human, African Green, Baboon, Cynomolgus, Rhesus
Clone	SE5A5
Purification	Affinity Purified
Conjugate	Unconjugated
Applications	FC Recommended concentration: FC: ≤2.0 µg per million cells in 100 µl volume
Format	Liquid
Concentration	Lot specific

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Size	100 µg
Buffer	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preservative	0.09% sodium azide
Storage	Store undiluted between 2°C and 8°C.
Ship	Wet ice

BACKGROUND

Introduction	CD172a, also known as signal-regulatory protein α (SIRPα), src homology 2 domain-containing phosphatase substrate-1 (SHPS1), PTPNS1, BIT, MFR, and P84, is a 75-110 kD transmembrane glycoprotein involved in receptor tyrosine kinase coupled signaling pathway. It belongs to the Ig superfamily and is primarily expressed on monocytes/macrophages, granulocytes, dendritic cells, and neurons. CD172a serves as a substrate of activated receptor tyrosine kinases (RTKs). The interaction of CD172a intracellular domain with SHP-1 and SHP-2 displays negative signaling in the regulation of leukocyte adhesion and transmigration, T cell activation, macrophage fusion, and phagocytosis. CD47 (IAP) is the extracellular ligand for CD172a. SIRPα was recently demonstrated to be a specifc marker for cardiomyocytes derived from human pluripotent stem cells.
Keywords	SIRPa;SIRPb;SIRPalpha/beta;BIT;SHPS1;MFR;P84;PTPNS1;CD172 antigen-like family member A;CD172 antigen-like family member B

GENE INFORMATION

Gene Name	SIRPA; SIRPB1
Entrez Gene ID	140885; 10326
UniProt ID	P78324; O00241

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