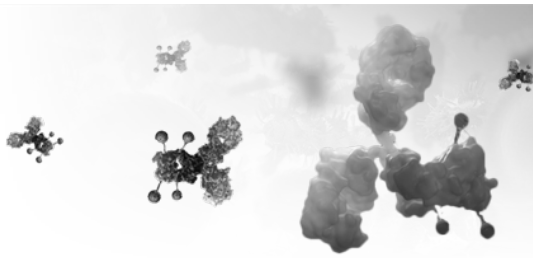

Rat Anti-Mouse CD172a (SIRPα) Monoclonal antibody, clone P84 (CABT-L4546)

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

PRODUCT INFORMATION

Product Overview	The P84 monoclonal antibody reacts with Signal-Regulatory Protein α (SIRPα), also known as CD172a. SIRPα is a type I transmembrane glycoprotein expressed on monocytes, macrophages, and dendritic cells. Neurons and other tissues of the central nervous system have also been shown to express SIRPα. Its ligand, CD47 is expressed by a wide variety of cells. SIRPα and CD47 regulate dendritic cell-mediated T cell activation, neutrophil migration, and phagocytosis. SIRPα diffuses laterally on the macrophage membrane and accumulates at a phagocytic synapse to bind CD47 which inhibits phagocytosis by macrophages. Anti-SIRPα antibodies that block the interaction of SIRPα with CD47 have been shown to suppress tumor formation in mice. The P84 antibody has been shown to have neutralizing activity in vivo and in vitro.
Target	Mouse CD172a (SIRPα)
Immunogen	Mouse brain membrane protein
Isotype	IgG1, κ
Source/Host	Rat
Species Reactivity	Mouse
Clone	P84
Purification	Protein A purified. Purity>95%. Determined by SDS-PAGE
Conjugate	Functional Grade
Applications	in vivo SIRPα blocking, In vitro SIRPα blocking, WB, IP, FC

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Molecular Weight	150 kDa
Format	0.2 μM filtered liquid. Purified from tissue culture supernatant in an animal free facility
Concentration	Lot specific
Size	5 mg
Buffer	PBS, pH 7.0. Contains no stabilizers or preservatives. [low endotoxin azide-free] Endotoxin level: <2EU/mg (<0.002EU/μg). Determined by LAL gel clotting assay Related dilution buffer: CABT-LB04
Preservative	None
Storage	The antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.
Ship	Wet ice

BACKGROUND

Introduction	The protein encoded by this gene is a member of the signal-regulatory-protein (SIRP) family, and also belongs to the immunoglobulin superfamily. SIRP family members are receptor-type transmembrane glycoproteins known to be involved in the negative regulation of receptor tyrosine kinase-coupled signaling processes. This protein can be phosphorylated by tyrosine kinases. The phospho-tyrosine residues of this PTP have been shown to recruit SH2 domain containing tyrosine phosphatases (PTP), and serve as substrates of PTPs. This protein was found to participate in signal transduction mediated by various growth factor receptors. CD47 has been demonstrated to be a ligand for this receptor protein. This gene and its product share very high similarity with several other members of the SIRP family. These related genes are located in close proximity to each other on chromosome 20p13. Multiple alternatively spliced transcript variants have been determined for this gene. [provided by RefSeq, Jul 2008]
Keywords	SIRPA;signal-regulatory protein alpha;BIT;MFR;P84;SIRP;MYD-1;SHPS1;CD172A;PTPNS1

GENE INFORMATION

Official Symbol	signal-regulatory protein alpha
Synonyms	SIRPA; signal-regulatory protein alpha; BIT; MFR; P84; SIRP; MYD-1; SHPS1; CD172A; PTPNS1
References	Yanagita, T., et al. (2017). "Anti-SIRPalpha antibodies as a potential new tool for cancer

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