abcam

ab23772

FITC Anti-SIRP alpha antibody [BL1H7]

Anti-SIRP alpha antibody [BL1H7] conjugated to FITC - suitable for flow cytometry, IHC-Fr, IHC-P, IP, Western blot, and reacts with pig samples. Clone [BL1H7] is a mouse monoclonal antibody cited in 10 publications.

Key facts

Isotype	IgG1
Host species	Mouse
Conjugation	FITC
Excitation/Emission	Ex: 495nm, Em: 519nm
Storage buffer	pH: 7.4 Preservative: 0.09% Sodium azide Constituents: PBS, 1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	Cell preparation containing SIRPA protein. The exact immunogen used to generate this antibody is proprietary information.
Clone number	BL1H7
Purification technique	Affinity purification Protein G
Concentration	0.1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

Reactivity data

WB

Expected

Species	Pig
Dilution info	Use at an assay dependent concentration.
Notes	-

Flow Cyt

Tested

Species	Pig
Dilution info	1/10 - 1/20
Notes	10µl of the suggested working dilution to 1x10^6 cells in 100µl

IHC-Fr

Expected

Species	Pig
Dilution info	Use at an assay dependent concentration.
Notes	-

IHC-P

Expected

Species	Pig
Dilution info	Use at an assay dependent concentration.
Notes	-

IP

Expected

Species	Pig
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information SIRPA

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	SIRP alpha also known as CD172a is a transmembrane receptor protein with a mass ranging between 70-110 kDa due to glycosylation. This protein extensively expresses on the surface of myeloid cells neurons and a subset of T-cells and is part of the immunoglobulin superfamily. SIRP alpha interacts with its ligand CD47 a widely expressed glycoprotein involved in immune response regulation. Its mechanical action primarily involves signal regulation through the recruitment of SHP-1 and SHP-2 two cytoplasmic tyrosine phosphatases.
Biological function summary	SIRP alpha functions significantly in the regulation of phagocytosis acting as a "don't eat me" signal to macrophages upon binding with CD47. It does not act alone; rather it is part of a complex that recruits SHP-1 and SHP-2 leading to inhibition of dephosphorylation activities essential for engulfment processes. This regulatory mechanism is important for maintaining cellular homeostasis ensuring that healthy cells are not mistakenly destroyed by the immune system.
Pathways	SIRP alpha plays an important role in the innate immune pathways involving the regulation of phagocytosis and cell-cell adhesion. Particularly it fits into the immune checkpoint pathways where it interacts closely with proteins like CD47 and plays a role in the interaction between the immune system and cancer cells. Through these pathways SIRP alpha helps maintain balance in the immune response allowing for the recognition of self versus non-self therefore preventing autoimmunity while facilitating the clearance of pathogens.
Associated diseases and disorders	SIRP alpha is implicated in cancer and autoimmune diseases. In cancer its interaction with CD47 allows tumor cells to escape phagocytosis promoting tumor survival and growth. In autoimmune disorders dysregulated SIRP alpha expression

or signaling could miscommunicate immune signals leading to the destruction of healthy tissue. Understanding the link between SIRP alpha and these conditions can reveal potential targets for therapeutic development especially using inhibitors or modulators targeting the SIRP alpha-CD47 interaction.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

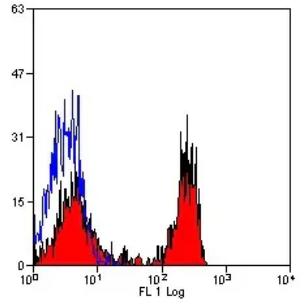
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

1 product image



Flow Cytometry - FITC Anti-SIRP alpha antibody [BL1H7] (ab23772)

SIRP alpha Flow Cytometry staining of Porcine peripheral blood mononuclear cells using mouse Anti-SIRP alpha antibody

Staining of porcine peripheral blood mononuclear cells with FITC conjugated Mouse anti Porcine CD172a antibody, clone BL1H7 (Red histogram) used at 1/10 to 1/20 dilution. Isotype control is represented by the blue histogram. Use 10µl of the suggested working dilution to $1x10^6$ cells in 100µl.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.