

For Research Use Only

# Mouse SIRP Alpha/CD172a Recombinant antibody, PBS Only (Capture/Detector)

Catalog Number: 84430-2-PBS



## Basic Information

<b>Catalog Number:</b> 84430-2-PBS	<b>GenBank Accession Number:</b> NM_007547.4	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug , Concentration: 1 mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 19261	<b>CloneNo.:</b> 241794D9
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P97797-2	
<b>Isotype:</b> IgG	<b>Full Name:</b> signal-regulatory protein alpha	
	<b>Calculated MW:</b> 56 kDa	
	<b>Observed MW:</b> 90-140 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, Cytometric bead array, Sandwich ELISA, Indirect ELISA, Sample test

**Species Specificity:**  
mouse

## Product Information

84430-2-PBS targets SIRP Alpha/CD172a as part of a matched antibody pair:

MP01311-2: 84430-2-PBS capture and 84430-3-PBS detection (validated in Cytometric bead array)

MP01311-4: 84430-3-PBS capture and 84430-2-PBS detection (validated in Sandwich ELISA)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

## Background Information

SIRP Alpha, also known as CD172a, SHPS-1, and BIT, belongs to the SIRP family. SIRP Alpha is a transmembrane glycoprotein expressed explicitly on myeloid cells and provides a "do not eat me" signal after engaging with integrin-associated protein CD47 on tumor cells (PMID: 36419386). SIRP Alpha shows heterogeneity in molecular weight (~65-120 kDa) in various tissues due to differential glycosylation (PMID: 18051954).

## Storage

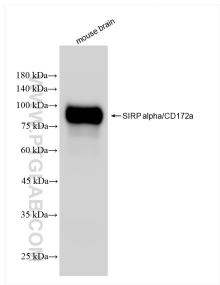
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS only, pH7.3

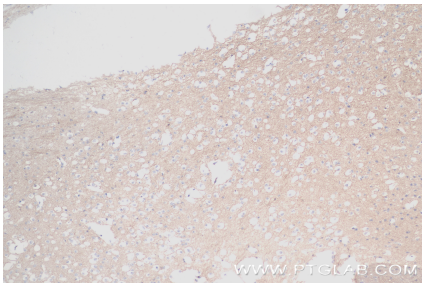
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

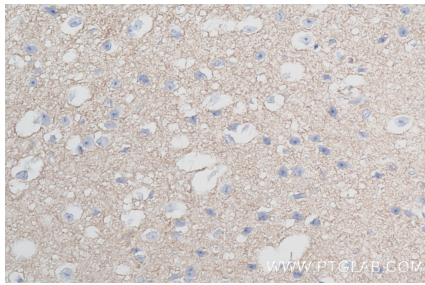
Selected Validation Data



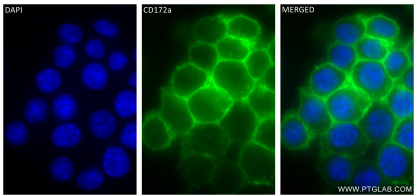
Various lysates were subjected to SDS PAGE followed by western blot with 84430-2-RR (SIRP alpha/CD172a antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84430-2-PBS in a different storage buffer formulation.



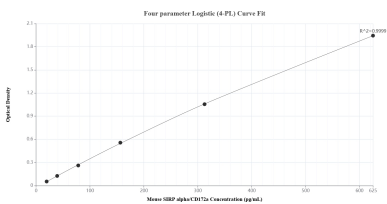
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 84430-2-RR (SIRP Alpha/CD172a antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84430-2-PBS in a different storage buffer formulation.



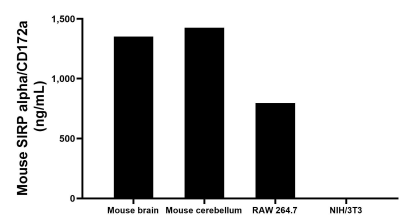
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 84430-2-RR (SIRP Alpha/CD172a antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84430-2-PBS in a different storage buffer formulation.



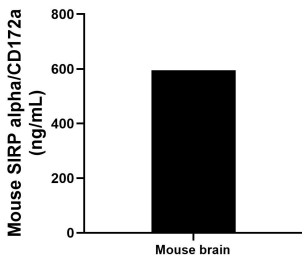
Immunofluorescent analysis of (4% PFA) fixed RAW 264.7 cells using SIRP alpha/CD172a antibody (84430-2-RR, Clone: 241794D9 ) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 84430-2-PBS in a different storage buffer formulation.



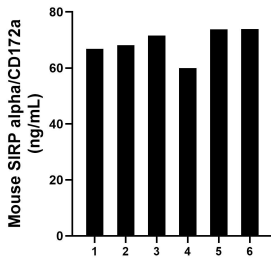
Sandwich ELISA standard curve of MP01311-4, Mouse SIRP alpha/CD172a Recombinant Matched Antibody Pair - PBS only. 84430-3-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Eg1520. 84430-2-PBS was HRP conjugated as the detection antibody. Range: 19.5-625 pg/mL.



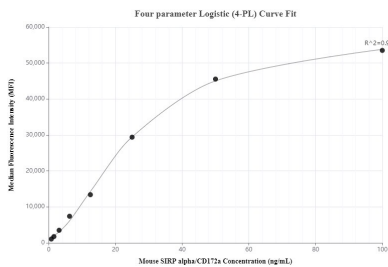
The mean SIRP alpha/CD172a concentration was determined to be 1,352.0 ng/mL in mouse brain tissue extract based on a 2.0 mg/mL extract load, 1,425.8 ng/mL in mouse cerebellum tissue extract based on a 2.9 mg/mL extract load, 796.6 ng/mL in RAW 264.7 cell extract based on a 4.2 mg/mL extract load and 4.0 ng/mL in NIH/3T3 cell extract based on a 4.4 mg/mL extract load.



The mean SIRP alpha/CD172a concentration was determined to be 595.2 ng/mL in mouse brain tissue homogenate based on a 2.2 mg/mL extract load.



Serum of six mice was measured. The SIRP alpha/CD172a concentration of detected samples was determined to be 69.0 ng/mL with a range of 59.9-73.9 ng/mL.



Cytometric bead array standard curve of MP01311-2, MOUSE SIRP Alpha/CD172a Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84430-2-PBS. Detection antibody: 84430-3-PBS. Standard: Eg1520. Range: 0.781-100 ng/mL.