For Research Use Only

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



Purification Method:

Protein A purification

CloneNo.:

241794D9

Catalog Number:84430-2-PBS

Basic Information

Catalog Number: GenBank Accession Number: 84430-2-PBS NM_007547.4

 Concentration:
 GeneID (NCBI):

 1 mg/ml
 19261

 Source:
 UNIPROT ID:

 Rabbit
 P97797-2

IgG signal-regulatory protein alpha

Immunogen Catalog Number: Calculated MW: EG1520 56 kDa

Observed MW: 90-140 kDa

Full Name:

Applications

Tested Applications:

WB, IHC, IF/ICC, Cytometric bead array, Sandwich

ELISA, Indirect ELISA, Sample test

Species Specificity:

mouse

Isotype:

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

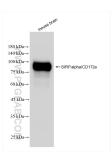
Storage:

Store at -80°C.

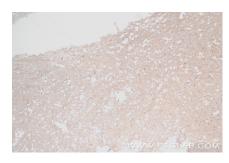
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer: PBS only, pH7.3

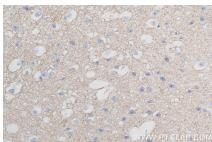
Selected Validation Data



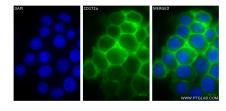
Various lysates were subjected to SDS PAGE followed by western blot with 84430-2-RR (SIRP alpha/CD172a antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84430-2-PBS in a different storage buffer formulation.



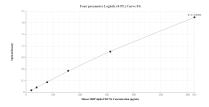
Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 84430-2-RR (SIRP Alpha/CD172a antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84430-2-PBS in a different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



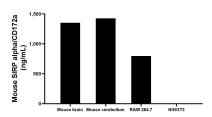
Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 84430-2-RR (SIRP Alpha/CD172a antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84430-2-PBS in a different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



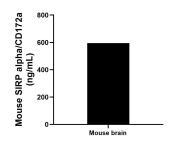
Immunofluorescent analysis of (4% PFA) fixed RAW 264.7 cells using SIRP alpha/CD172a antibody (84430-2-RR, Clone: 241794D9) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 84430-2-PBS in a different storage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



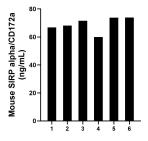
Sandwich ELISA standard curve of MP01311-4, Mouse SIRP alpha/CD172a Recombinant Matched Antibody Pair - PBS only. 84430-3-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Eg1520. 84430-2-PBS was HRP conjugated as the detection antibody. Range: 19.5-625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



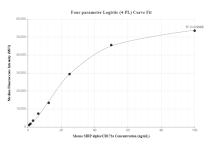
The mean SIRP alpha/CD172a concentration was determined to be 1,352.0 ng/mL in mouse brain tissue extract based on a 2.0 mg/mL extract load, 1,425.8 ng/mL in mouse cerebellum tissue extract based on a 2.9 mg/mL extract load, 796.6 ng/mL in RAW 264.7 cell extract based on a 4.2 mg/mL extract load and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