

Product datasheet

Anti-SIRP alpha antibody [EPR24187-17] ab259357

Recombinant RabMAb

[10 Images](#)

Overview

Product name	Anti-SIRP alpha antibody [EPR24187-17]
Description	Rabbit monoclonal [EPR24187-17] to SIRP alpha
Host species	Rabbit
Specificity	ICC and Flow Cyt applications do not react with Rat species.
Tested applications	Suitable for: Flow Cyt (Intra), ICC/IF, WB, IHC-P Unsuitable for: IP
Species reactivity	Reacts with: Mouse, Rat
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Mouse cerebellum, Rat hippocampus and RAW264.7 lysates. IHC-P: Mouse cerebrum, Mouse spleen, Mouse lung carcinoma, Rat cerebrum and Rat spleen tissues. ICC/IF: RAW264.7 cells. Flow cyt (Intra): RAW264.7 cells.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal

Clone number EPR24187-17
Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab259357 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/50.
ICC/IF		1/100.
WB		1/1000. Predicted molecular weight: 55 kDa.
IHC-P		1/1000.

Application notes Is unsuitable for IP.

Target

Function Immunoglobulin-like cell surface receptor for CD47. Acts as docking protein and induces translocation of PTPN6, PTPN11 and other binding partners from the cytosol to the plasma membrane. Supports adhesion of cerebellar neurons, neurite outgrowth and glial cell attachment. May play a key role in intracellular signaling during synaptogenesis and in synaptic function (By similarity). Involved in the negative regulation of receptor tyrosine kinase-coupled cellular responses induced by cell adhesion, growth factors or insulin. Mediates negative regulation of phagocytosis, mast cell activation and dendritic cell activation. CD47 binding prevents maturation of immature dendritic cells and inhibits cytokine production by mature dendritic cells.

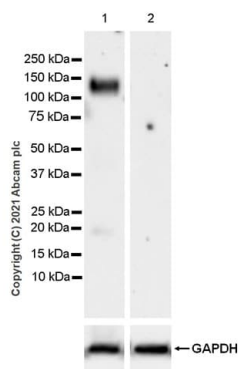
Tissue specificity Ubiquitous. Highly expressed in brain. Detected on myeloid cells, but not T-cells. Detected at lower levels in heart, placenta, lung, testis, ovary, colon, liver, small intestine, prostate, spleen, kidney, skeletal muscle and pancreas.

Sequence similarities Contains 2 Ig-like C1-type (immunoglobulin-like) domains.
Contains 1 Ig-like V-type (immunoglobulin-like) domain.

Post-translational modifications N-glycosylated.
Phosphorylated on tyrosine residues in response to stimulation with EGF, growth hormone, insulin and PDGF. Dephosphorylated by PTPN11.

Cellular localization Membrane.

Images



Western blot - Anti-SIRP alpha antibody [EPR24187-17] (ab259357)

All lanes : Anti-SIRP alpha antibody [EPR24187-17] (ab259357) at 1/1000 dilution

Lane 1 : RAW264.7 (mouse Abelson murine leukemia virus-induced tumor macrophage) whole cell lysate

Lane 2 : A20 (mouse reticulum sarcoma b lymphocyte) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)) at 1/5000 dilution

Predicted band size: 55 kDa

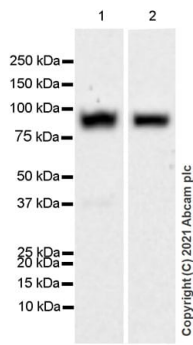
Observed band size: 120 kDa

Blocking and diluting buffer and concentration: 5% NFDN/TBST.

The expression profile/ molecular weight observed is consistent with what has been described in the literature (PMID: 24143245).

Negative control: A20 (PMID:9712903).

Exposure time: 70 seconds



Western blot - Anti-SIRP alpha antibody
[EPR24187-17] (ab259357)

All lanes : Anti-SIRP alpha antibody [EPR24187-17] (ab259357)
at 1/1000 dilution

Lane 1 : Mouse cerebellum tissue lysate

Lane 2 : Rat hippocampus tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/50000
dilution

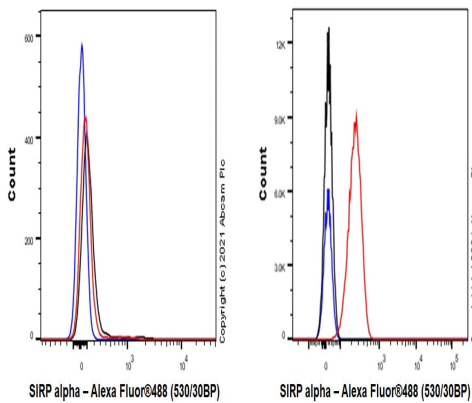
Predicted band size: 55 kDa

Observed band size: 85 kDa

Blocking and diluting buffer and concentration: 5% NFD/MTBST.

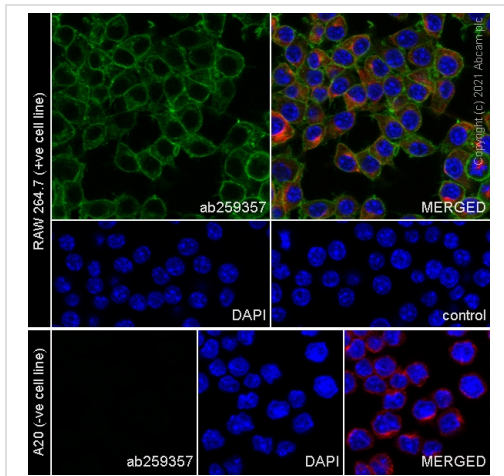
The expression profile/ molecular weight observed is consistent
with what has been described in the literature (PMID:28545141).

Exposure time: Lane 1: 125 seconds; Lane 2: 3 minutes



Flow Cytometry (Intracellular) - Anti-SIRP alpha
antibody [EPR24187-17] (ab259357)

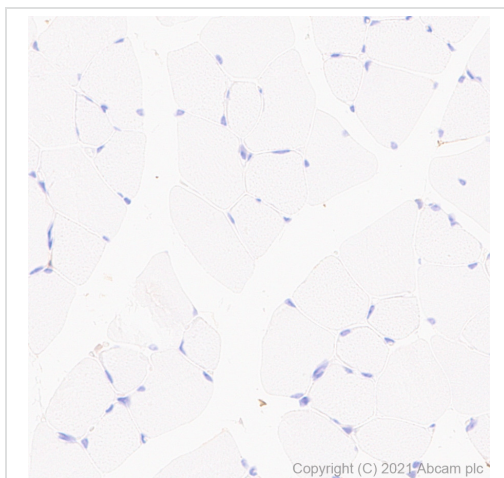
Flow cytometric analysis of 4% paraformaldehyde fixed 90%
methanol permeabilized A20 (Mouse reticulum sarcoma B
lymphocyte, Left) / RAW 264.7 (Mouse Abelson murine leukemia
virus-induced tumor macrophage, Right) cells labelling SIRP alpha
with ab259357 at 1/50 dilution (1µg)/ (Red) compared with a Rabbit
monoclonal IgG (**ab172730**) (Black) isotype control and an
unlabelled control (cells without incubation with primary antibody
and secondary antibody) (Blue). A Goat Anti-Rabbit IgG (Alexa
Fluor® 488, **ab150081**) at 1/2000 dilution was used as the
secondary antibody.



Immunocytochemistry/ Immunofluorescence - Anti-SIRP alpha antibody [EPR24187-17] (ab259357)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized RAW 264.7 cells labelling SIRP alpha with ab259357 at 1/100 (4.41 ug/ml) dilution, followed by [ab150081](#) Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 2 ug/ml dilution (Green). Confocal image showing membranous and cytoplasmic staining in RAW 264.7 cell line. Negative control: A20 (PMID: 9712903 . [ab195889](#) Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 2.5ug/ml dilution (Red). The Nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is [ab150081](#) Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/ml dilution.

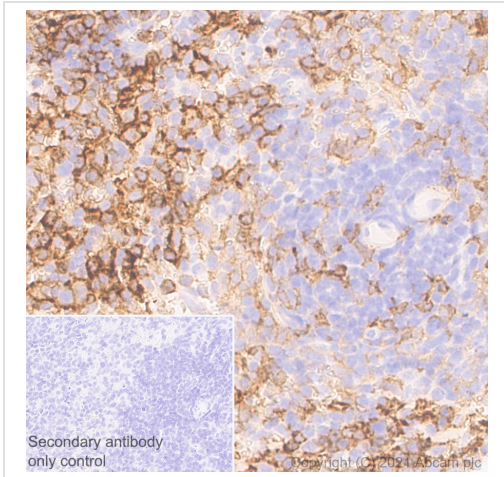


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SIRP alpha antibody [EPR24187-17] (ab259357)

Immunohistochemical analysis of paraffin-embedded Mouse skeletal muscle tissue labelling SIRP alpha with ab259357 at 1/1000 (0.441 ug/ml) followed by a ready to use LeicaDS9800 (BOND™, Polymer Refine Detection) was used. Negative control: no staining on mouse skeletal muscle. The section was incubated with ab259357 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (BOND™, Polymer Refine Detection) was used.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins

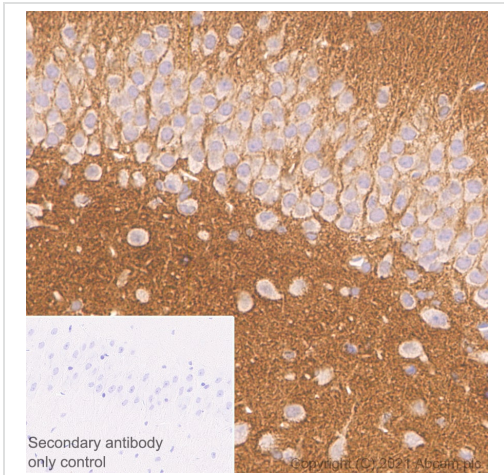


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SIRP alpha antibody [EPR24187-17] (ab259357)

Immunohistochemical analysis of paraffin-embedded Rat spleen tissue labelling SIRP alpha with ab259357 at 1/1000 (0.441 ug/ml) followed by a ready to use Leica DS9800 (BOND™, Polymer Refine Detection) was used. Positive staining on rat spleen. The section was incubated with ab259357 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Leica DS9800 (BOND™, Polymer Refine Detection) was used.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins

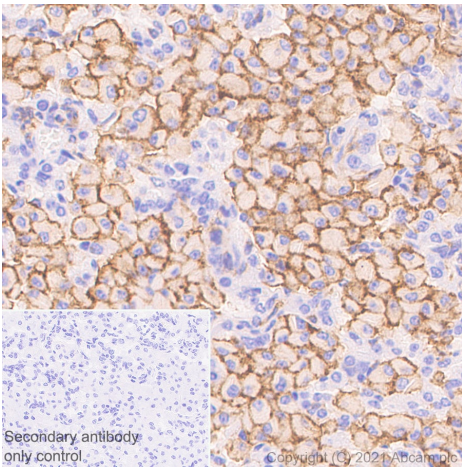


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SIRP alpha antibody [EPR24187-17] (ab259357)

Immunohistochemical analysis of paraffin-embedded Rat cerebrum tissue labelling SIRP alpha with ab259357 at 1/1000 (0.441 ug/ml) followed by a ready to use Leica DS9800 (BOND™, Polymer Refine Detection) was used. Positive staining on rat cerebrum. The section was incubated with ab259357 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Leica DS9800 (BOND™, Polymer Refine Detection) was used.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins

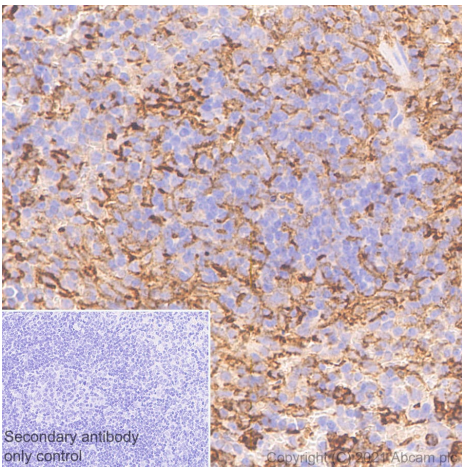


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SIRP alpha antibody [EPR24187-17] (ab259357)

Immunohistochemical analysis of paraffin-embedded Mouse lung carcinoma tissue labelling SIRP alpha with ab259357 at 1/1000 (0.441 ug/ml) followed by a ready to use Leica DS9800 (BOND™, Polymer Refine Detection) was used. Positive staining on mouse lung carcinoma. The section was incubated with ab259357 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Leica DS9800 (BOND™, Polymer Refine Detection) was used.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins

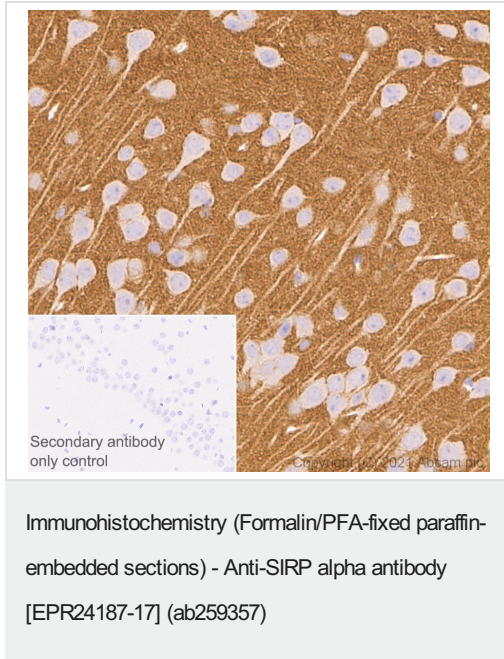


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SIRP alpha antibody [EPR24187-17] (ab259357)

Immunohistochemical analysis of paraffin-embedded Mouse spleen tissue labelling SIRP alpha with ab259357 at 1/1000 (0.441 ug/ml) followed by a ready to use Leica DS9800 (BOND™, Polymer Refine Detection) was used. Positive staining on mouse spleen. The section was incubated with ab259357 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Leica DS9800 (BOND™, Polymer Refine Detection) was used.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins



Immunohistochemical analysis of paraffin-embedded Mouse cerebrum tissue labelling SIRP alpha with ab259357 at 1/1000 (0.441 ug/ml) followed by a ready to use Leica DS9800 (BOND™, Polymer Refine Detection) was used. Positive staining on mouse cerebrum. The section was incubated with ab259357 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use LeicaDS9800 (BOND™, Polymer Refine Detection) was used.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins

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