abcam

ab322705

Anti-MARCO antibody [RM2074]

Recombinant | RabMAb | KO Validated | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Multiclonal
Immunogens	The exact immunogen used to generate this antibody is proprietary information.
Clone number	RM2074
Purification technique	Affinity purification Protein A
Specificity	Unsuitable for human and rat IHC.
Concentration	0.499 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Mouse
Dilution info	1/500
Notes	

Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Expected

Species	Human, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

WB

Tested

Species	Human
Dilution info	1/1000
Notes	-

Species	Mouse
Dilution info	1/1000
Notes	-

Species	Rat
Dilution info	1/1000
Notes	-

IP

Tested

Species	Mouse
Dilution info	1/30
Notes	-

Species	Rat
Dilution info	1/30
Notes	-

Expected

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

ICC/IF

Tested

Species	Human
Dilution info	1/50
Notes	-

Species	Mouse
Dilution info	1/50
Notes	-

Expected

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

Flow Cyt

Tested

Species	Human
Dilution info	1/50
Notes	-

Species	Mouse
Dilution info	1/50
Notes	-

Expected

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

IHC-Fr

Tested

Species	Mouse
Dilution info	1/500
Notes	-

Species	Rat
Dilution info	1/500
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Expected

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

Target data

See full target information MARCO

Function	Pattern recognition receptor (PRR) which binds Gram-positive and Gram-negative bacteria (PubMed:9468508). Also plays a role in binding of unopsonized particles by alveolar macrophages (By similarity). Binds to the secretoglobin SCGB3A2 (PubMed:12847263).

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
Storage information	Avoid freeze / thaw cycle

Notes

What are recombinant multiclonals?
Recombinant multiclonals are a mixture of recombinant antibodies co-expressed from a library of heavy and light chains. They offer several advantages including:

- The sensitivity of polyclonal antibodies by recognising multiple epitopes
- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

View our range of recombinant multiclonal antibodies.

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

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

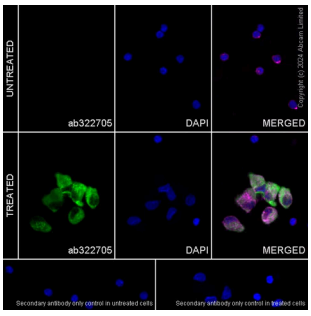
We do not recommend this combination. It is not covered by our product promise.

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.

16 product images



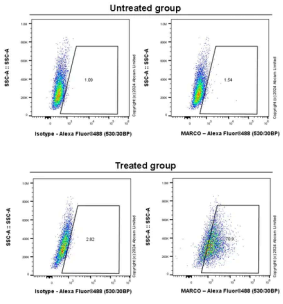
Immunocytochemistry/ Immunofluorescence - Anti-MARCO antibody [RM2074] (ab322705)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized Human PBMC (human peripheral blood mononuclear cell) cells labelling MARCO with ab322705 at 1/100 (5.16 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 2ug/ml dilution (Green).

Confocal image showing increased cytoplasmic staining in human PBMC (shown in green) treated with M-CSF (500 ng/mL) for 72 hr and then IL-10 (20 ng/mL) for 24 hr. The counterstain was observed in magenta. Nuclear DNA was labelled with DAPI (shown in blue). Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 2.5ug/ml dilution (Magenta). 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 2ug/ml dilution.

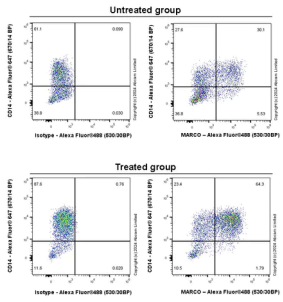


Flow Cytometry - Anti-MARCO antibody [RM2074] (ab322705)

Flow cytometric analysis of J774A.1 (mouse reticulum cell sarcoma monocyte/macrophage, upper left and right) untreated / J774A.1 cells treated with 1ug/mL LPS for 24 hours (lower left and right) cells labelling MARCO with ab322705 at 1/50 dilution (1ug) / Right compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody).

Goat anti-Rabbit IgG (Alexa Fluor® 488, ab150077) at 1/5000 dilution was used as the secondary antibody.

Gated on viable cells.

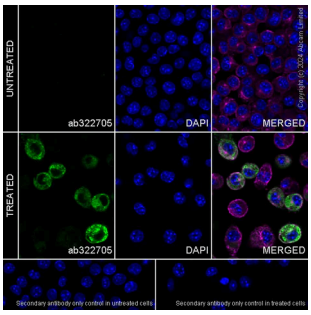


Flow Cytometry - Anti-MARCO antibody [RM2074] (ab322705)

Flow cytometric analysis of Human PBMC (upper left and right) / Human PBMC treated with 50ng/mL M-CSF for 72 hours and 20ng/mL IL-10 for 24 hours (lower left and right) cells labelling MARCO with ab322705 at 1/500 dilution (0.1ug) / Right compared with a Rabbit monoclonal IgG (ab172730) / Left isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody).

Goat anti-Rabbit IgG (Alexa Fluor® 488, ab150077) at 1/5000 dilution was used as the secondary antibody.

Cells were co-stained with anti human CD14 conjugated to BV421.
Gated on viable Monocytes.



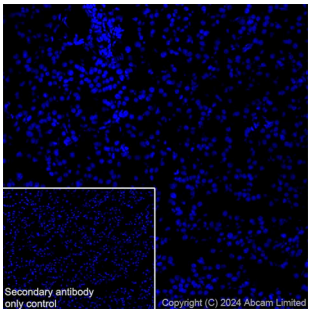
Immunocytochemistry/ Immunofluorescence - Anti-MARCO antibody [RM2074] (ab322705)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% TritonX-100 permeabilized J774A.1 (mouse reticulum cell sarcoma monocyte/macrophage) cells labelling MARCO with ab322705 at 1/50 (10.32 ug/ml) dilution, followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed antibody at 1/1000 2ug/ml dilution (Green).

Confocal image showing increased cytoplasmic staining in J774A.1 cells (shown in green) treated with lipopolysaccharide (1 ug/mL) for 24 hr. The counterstain was observed in magenta. Nuclear DNA was labelled with DAPI (shown in blue). Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

ab195889 Anti-alpha Tubulin mouse monoclonal antibody - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 2.5ug/ml dilution (Magenta). 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 2ug/ml dilution.



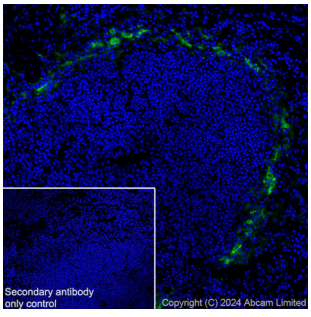
Immunohistochemistry (Frozen sections) - Anti-MARCO antibody [RM2074] (ab322705)

MARCO Immunohistochemistry (Frozen sections) staining of Rat pancreas (fresh frozen) using rabbit Anti-MARCO antibody

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Rat pancreas (fresh frozen) tissue labeling MARCO with ab322705 at 1/500 (1.032 ug/ml) dilution followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/mL dilution (Green).

Negative control: confocal image showing no staining on rat pancreas. The nuclear counterstain was DAPI (Blue). The section was incubated with ab322705 for 60 mins at room temperature. The section was then mounted using Fluoromount®.The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

Secondary antibody control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbedat 1/1000 2 ug/mL dilution.

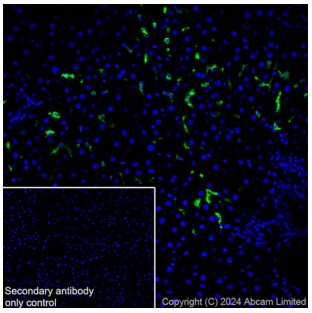


Immunohistochemistry (Frozen sections) - Anti-MARCO antibody [RM2074] (ab322705)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Mouse spleen (fresh frozen) tissue labeling MARCO with ab322705 at 1/500 (1.032 ug/ml) dilution followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/mL dilution (Green).

Confocal image showing positive staining in red pulp of mouse spleen. The nuclear counterstain was DAPI (Blue). The section was incubated with ab322705 for 60 mins at room temperature. The section was then mounted using Fluoromount®.The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

Secondary antibody control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbedat 1/1000 2 ug/mL dilution.

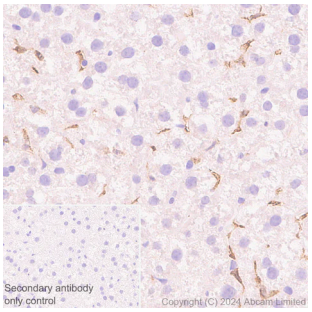


Immunohistochemistry (Frozen sections) - Anti-MARCO antibody [RM2074] (ab322705)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Rat liver (fresh frozen) tissue labeling MARCO with ab322705 at 1/500 (1.032 ug/ml) dilution followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/mL dilution (Green).

Confocal image showing positive staining in Kupffer cells of rat liver. The nuclear counterstain was DAPI (Blue). The section was incubated with ab322705 for 60 mins at room temperature. The section was then mounted using Fluoromount®.The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

Secondary antibody control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbedat 1/1000 2 ug/mL dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MARCO antibody [RM2074] (ab322705)

MARCO Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Mouse liver using rabbit Anti-MARCO antibody

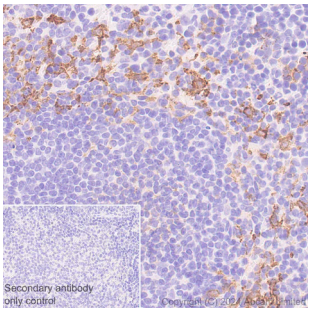
Immunohistochemical analysis of paraffin-embedded Mouse liver tissue labeling MARCO with ab322705 at 1/500 dilution.
Positive staining on mouse liver

The primary antibody was incubated for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Counterstained with Hematoxylin.

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MARCO antibody [RM2074] (ab322705)

MARCO Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining of Mouse spleen using rabbit Anti-MARCO antibody

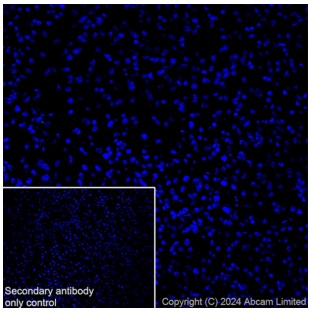
Immunohistochemical analysis of paraffin-embedded Mouse spleen tissue labeling MARCO with ab322705 at 1/500 dilution.
Positive staining on mouse spleen

The primary antibody was incubated for 30 mins at room temperature.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Counterstained with Hematoxylin.

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



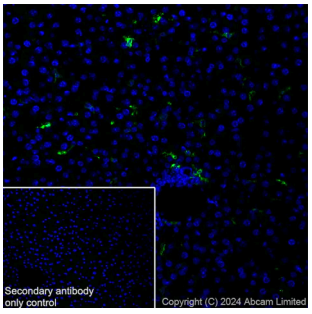
Immunohistochemistry (Frozen sections) - Anti-MARCO antibody [RM2074] (ab322705)

MARCO Immunohistochemistry (Frozen sections) staining of Mouse pancreas (fresh frozen) using rabbit Anti-MARCO antibody

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Mouse pancreas (fresh frozen) tissue labeling MARCO with ab322705 at 1/500 (1.032 ug/ml) dilution followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/mL dilution (Green).

Negative control: confocal image showing no staining on mouse pancreas. The nuclear counterstain was DAPI (Blue). The section was incubated with ab322705 for 60 mins at room temperature. The section was then mounted using Fluoromount®.The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

Secondary antibody control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbedat 1/1000 2 ug/mL dilution.

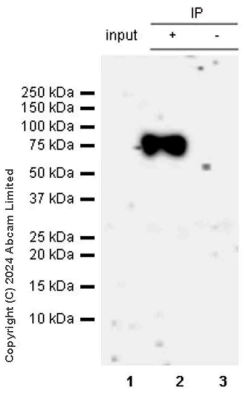


Immunohistochemistry (Frozen sections) - Anti-MARCO antibody [RM2074] (ab322705)

Immunohistochemical analysis of 4% PFA-fixed, 0.2% Triton X-100 permeabilized frozen Mouse liver (fresh frozen) tissue labeling MARCO with ab322705 at 1/500 (1.032 ug/ml) dilution followed by ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 2 ug/mL dilution (Green).

Confocal image showing positive staining in Kupffer cells of mouse liver. The nuclear counterstain was DAPI (Blue). The section was incubated with ab322705 for 60 mins at room temperature. The section was then mounted using Fluoromount®.The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

Secondary antibody control: Secondary antibody is ab150081 Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbedat 1/1000 2 ug/mL dilution.



Immunoprecipitation - Anti-MARCO antibody [RM2074] (ab322705)

MARCO was immunoprecipitated from 0.35 mg Rat liver tissue lysate with ab322705 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab322705 at 1000 dilution. VeriBlot for IP secondary antibody(HRP)(ab131366) was used at 1/5000 dilution.

Lane 1: Rat liver tissue lysate
Lane 2: ab322705 IP in Rat liver tissue lysate
Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab322705 in rat liver tissue lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST

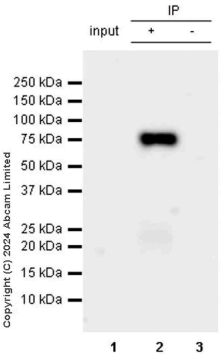
All lanes:
Immunoprecipitation - Anti-MARCO antibody [RM2074] (ab322705) at 1/30 dilution

All lanes:
Rat liver tissue lysate

Secondary

All lanes:
Immunoprecipitation - VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/5000 dilution

Exposure time: 180s



Immunoprecipitation - Anti-MARCO antibody [RM2074] (ab322705)

MARCO was immunoprecipitated from 0.35 mg Mouse lymph node tissue lysate with ab322705 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab322705 at 1000 dilution. VeriBlot for IP secondary antibody(HRP)(ab131366) was used at 1/5000 dilution.

Lane 1: Mouse lymph node tissue lysate
Lane 2: ab322705 IP in Mouse lymph node tissue lysate
Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab322705 in mouse lymph node tissue lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST

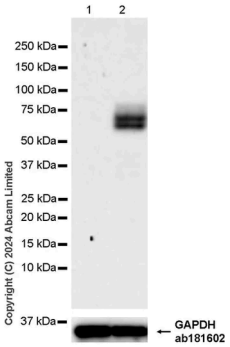
All lanes:
Immunoprecipitation - Anti-MARCO antibody [RM2074] (ab322705) at 1/30 dilution

All lanes:
Mouse lymph node tissue lysate

Secondary

All lanes:
Immunoprecipitation - VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/5000 dilution

Exposure time: 8s



Western blot - Anti-MARCO antibody [RM2074] (ab322705)

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

The expression profile/ molecular weight observed is consistent with what has been described in the literature (PMID: 26892079).

The expression of MARCO/Macrophage receptor is induced by Lipopolysaccharides (LPS) treatment (PMID: 9916718).

This blot was developed using a high-sensitivity ECL substrate, allowing for the detection of proteins in the mid-femtogram range.

In Western blot, Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) staining at 1/200000 dilution.

All lanes:
Western blot - Anti-MARCO antibody [RM2074] (ab322705) at 1/1000 dilution

Lane 1:
Untreated J774A.1 (mouse reticulum cell sarcoma monocyte/macrophage) whole cell lysate at 20 µg

Lane 2:
J774A.1 treated with 1 ug/ml LPS for 24 hours whole cell lysate at 20 µg

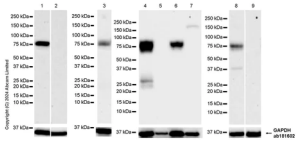
Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Developed using the ECL technique.

Observed band size: 60-75 kDa, 36 kDa

Exposure time: 103s



Western blot - Anti-MARCO antibody [RM2074] (ab322705)

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

Low expression: pancreas, brain.

The expression profile/ molecular weight observed is consistent with what has been described in the literature (PMID: 26892079).

In Western blot, Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) staining at 1/200000 dilution.

Exposure time: Lanes 1-3, 8-9: 180 seconds, lanes 4-7: 37 seconds

All lanes:
Western blot - Anti-MARCO antibody [RM2074] (ab322705) at 1/1000 dilution

Lane 1:
Human lung tissue lysate at 20 µg

Lane 2:
Human pancreas tissue lysate at 20 µg

Lane 3:

Mouse spleen tissue lysate at 20 µg

Lane 4:
Mouse lymph node tissue lysate at 20 µg

Lane 5:
Mouse pancreas tissue lysate at 20 µg

Lane 6:
Rat lymph node tissue lysate at 20 µg

Lane 7:
Rat pancreas tissue lysate at 20 µg

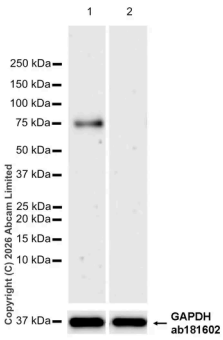
Lane 8:
Rat liver tissue lysate at 20 µg

Lane 9:
Rat brain tissue lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Observed band size: 60-75 kDa, 36 kDa



Western blot - Anti-MARCO antibody [RM2074] (ab322705)

MARCO Western blot staining using rabbit Anti-MARCO antibody

Blocking and diluting buffer and concentration: 5% NFDM/TBST.
In Western blot, Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602) staining at 1/200,000 dilution.

The tissue samples were kindly provided by GemPharmatech. C57BL/6JGpt wildtype mice and Marco-KO homozygous mice (Strain ID: T016781).

All lanes:
Western blot - Anti-MARCO antibody [RM2074] (ab322705) at 1/1000 dilution

Lane 1:
Wild-type mouse spleen tissue lysate at 20 µg

Lane 2:
Marco knockout mouse spleen tissue lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/100000 dilution

Observed band size: 75 kDa, 36 kDa

Exposure time: 180s

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