abcam

ab97552

Anti-CD39 antibody [AC2]

Recombinant

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Clone number	AC2
Purification technique	Affinity purification Protein A
Concentration	1.038 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	0.2 µg/mL
Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

ICC/IF

Tested

Species	Human
Dilution info	1 µg/mL
Notes	-

IHC-Fr

Tested

Species	Human
Dilution info	2.5 µg/mL
Notes	-

Target data

See full target information ENTPD1

Function	Catalyzes the hydrolysis of nucleoside triphosphates (NTPs) and diphosphates (NDPs) (Probable) (PubMed:8529670, PubMed:8626624, PubMed:8955160, PubMed:8996251). The enzyme sequentially removes phosphate groups in two successive steps, converting NTPs to nucleoside monophosphates (NMPs) via NDP intermediates (Probable) (PubMed:8529670, PubMed:8626624, PubMed:8955160, PubMed:8996251). This activity contributes to the regulation of extracellular levels of nucleotides (Probable) (PubMed:8529670, PubMed:8626624, PubMed:8955160, PubMed:8996251). By hydrolyzing proinflammatory ATP and platelet-activating ADP to AMP, it blocks platelet aggregation and supports blood flow (PubMed:8955160, PubMed:8996251).

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

This product was switched from a hybridoma to a recombinant production format on 27th October 2021.
What are the advantages of a recombinant monoclonal antibody?
This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free batch production

For more information, read more on recombinant antibodies.

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

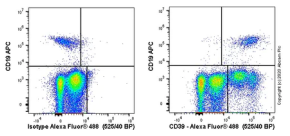
We do not recommend this combination. It is not covered by our product promise.

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.

5 product images



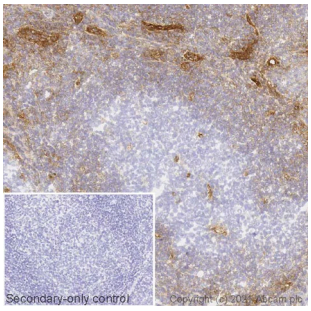
Flow Cytometry - Anti-CD39 antibody [AC2] (ab97552)

CD39 Flow Cytometry staining using mouse Anti-CD39 antibody

Flow cytometry staining of human whole blood with ab97552 (right) or mouse IgG1κ (ab170190) isotype (left). Red blood cells of 200 µl blood were lysed, then cells were incubated for 30 min on ice in 1x PBS containing 10µg/ml human IgG and 10% normal goat serum to block FC receptors and non-specific protein-protein interaction followed by the antibody (ab97552) or mouse IgG1κ (ab170190) isotype ($1x10^6$ in 100 µl at 0.2 µg/ml) for 30 min on ice.
The secondary antibody Goat anti-mouse IgG H&L (Alexa Fluor® 488, pre-adsorbed) (ab150117) was used at 1/2000 dilution for 30 min on ice.

The cells were simultaneously stained with CD19 APC.

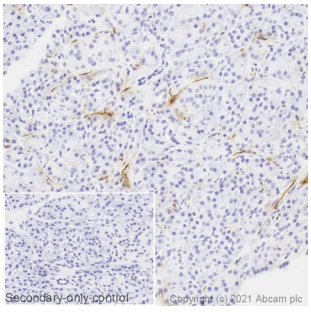
Acquisition of >30000 events were collected using a 50 mW Blue laser (488nm) and 525/40 bandpass filter. Events were gated on alive cells.



Immunohistochemistry (Frozen sections) - Anti-CD39 antibody [AC2] (ab97552)

CD39 Immunohistochemistry (Frozen sections) staining using mouse Anti-CD39 antibody

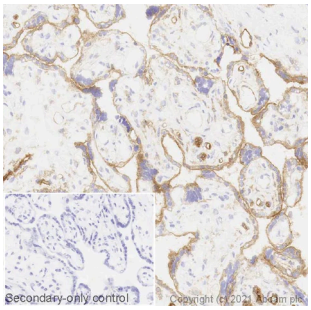
IHC image of CD39 staining in a section of frozen normal human tonsil* performed on a Leica BOND™ system using the standard protocol. The section was fixed in 10% paraformaldehyde (10 min) prior to staining. The section was incubated with ab97552, 1µg/ml for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody. For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.
*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre



Immunohistochemistry (Frozen sections) - Anti-CD39 antibody [AC2] (ab97552)

CD39 Immunohistochemistry (Frozen sections) staining using mouse Anti-CD39 antibody

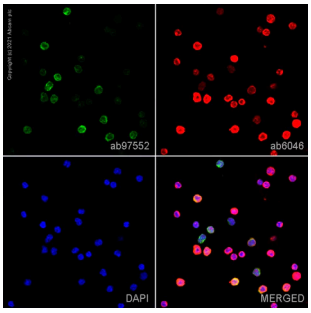
IHC image of CD39 staining in a section of frozen normal human pancreas* performed on a Leica BOND™ system using the standard protocol. The section was fixed in 10% paraformaldehyde (10 min) prior to staining. The section was incubated with ab97552, 1µg/ml for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody. For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.
*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre



Immunohistochemistry (Frozen sections) - Anti-CD39 antibody [AC2] (ab97552)

CD39 Immunohistochemistry (Frozen sections) staining using mouse Anti-CD39 antibody

IHC image of CD39 staining in a section of frozen normal human placenta* performed on a Leica BOND™ system using the standard protocol. The section was fixed in 10% paraformaldehyde (10 min) prior to staining. The section was incubated with ab97552, 1µg/ml for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. The inset secondary-only control image is taken from an identical assay without primary antibody. For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.
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Immunocytochemistry/ Immunofluorescence - Anti-CD39 antibody [AC2] (ab97552)

CD39 Immunocytochemistry/ Immunofluorescence staining using mouse Anti-CD39 antibody

ab97552 staining CD39 in human peripheral blood mononuclear cells. The cells were fixed with 4% paraformaldehyde (10 min),
permeabilized with 0.1% PBS-Tween for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in
0.1% PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab97552 at 1µg/ml and ab6046, Rabbit polyclonal to beta Tubulin - Loading Control. Cells were then incubated with ab150117, Goat polyclonal Secondary Antibody to Mouse IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (shown in green) and ab150080, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 594) at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue).
Image was acquired with a confocal microscope (LeicaMicrosystems TCS SP8) and a single confocal section is shown.

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