abcam

ab244559

Anti-CD43 antibody [W3/13] - BSA and Azide free

Key facts

Isotype	IgG
Host species	Mouse
Storage buffer	Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	W3/13
Purification technique	Affinity purification Protein G
Light chain type	kappa
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from TCS.

Reactivity data

Flow Cyt

Tested

Species	Rat

Dilution info	0.2 µg/mL
Notes	-

IHC-P

Tested

Species	Rat
Dilution info	1 µg/mL
Notes	-

IHC-Fr

Tested

Species	Rat
Dilution info	1 µg/mL
Notes	-

Target data

See full target information SPN

Function

Predominant cell surface sialoprotein of leukocytes which regulates multiple T-cell functions, including T-cell activation, proliferation, differentiation, trafficking and migration. Positively regulates T-cell trafficking to lymph-nodes via its association with ERM proteins (EZR, RDX and MSN) (By similarity). Negatively regulates Th2 cell differentiation and predisposes the differentiation of T-cells towards a Th1 lineage commitment. Promotes the expression of IFN-gamma by T-cells during T-cell receptor (TCR) activation of naive cells and induces the expression of IFN-gamma by CD4(+) T-cells and to a lesser extent by CD8(+) T-cells (PubMed:18036228). Plays a role in preparing T-cells for cytokine sensing and differentiation into effector cells by inducing the expression of cytokine receptors IFNGR and IL4R, promoting IFNGR and IL4R signaling and by mediating the clustering of IFNGR with TCR (PubMed:24328034). Acts as a major E-selectin ligand responsible for Th17 cell rolling on activated vasculature and recruitment during inflammation. Mediates Th17 cells, but not Th1 cells, adhesion to E-selectin. Acts as a T-cell counter-receptor for SIGLEC1 (By similarity). CD43 cytoplasmic tail. Protects cells from apoptotic signals, promoting cell survival.

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	+4°C
Aliquoting information	Upon delivery aliquot
Storage information	Do Not Freeze

Notes

ab244559 is the carrier-free version of ab22351.

Want a custom formulation?

This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com

Conjugation ready

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

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.

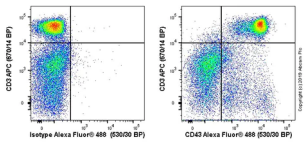
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

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.

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3 product images



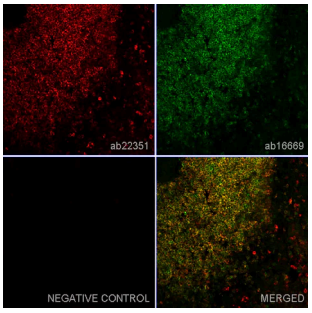
Flow Cytometry - Anti-CD43 antibody [W3/13] - BSA and Azide free (ab244559)

CD43 Flow Cytometry staining using mouse Anti-CD43 antibody

This data was generating using the same clone in a different formulation (ab22351)
Lewis rat splenocytes stained with ab22351 (right) or mouse IgG1κ (left). Lewis rat splenocytes were incubated for 30 min on ice in 10% rat serum to block FC receptors and non-specific protein-protein interaction followed by the antibody (ab22351) or mouse IgG1κ Isotype (ab170190) ($1x10^6$ in 100µl 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 at 4°C. The cells were simultaneously stained with CD3 APC antibody.

Acquisition of >30,000 events were collected using a 50 mW Blue laser (488nm) and 530/30 bandpass filter. Events were gated on viable lymphocytes.



Immunohistochemistry (Frozen sections) - Anti-CD43 antibody [W3/13] - BSA and Azide free (ab244559)

CD43 Immunohistochemistry (Frozen sections) staining using mouse Anti-CD43 antibody

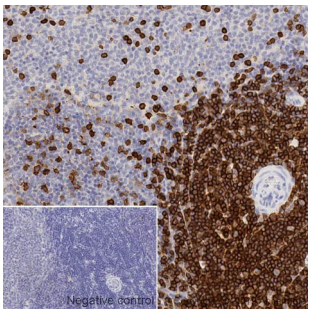
This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide (ab22351)
IHC image of CD43 staining in a section of frozen normal rat spleen*.

The section was fixed using 10% formaldehyde in 1XPBS for 10 minutes. No antigen retrieval step was performed prior to staining. Non-specific protein-protein interactions were then blocked in TBS containing 0.025% (v/v) Triton X-100, 0.3M glycine and 1% (w/v) BSA for 1h at room temperature. The section was then incubated overnight at +4°C in TBS containing 0.025% (v/v) Triton X-100 and 1% (w/v) BSA with ab22351 (shown in red) at 1µg/ml and co-localisation of T cells stained using ab16669 (shown in green), Rabbit monoclonal to CD3, at 1/150 dilution. The section was then incubated with ab150119 (Goat polyclonal Secondary Antibody to Mouse IgG - H&L (Alexa Fluor®647, 1/1000)) and ab150077 (Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor®488, 1/1000)) for 1 hour at room temperature. The secondary-only control image is taken from an identical assay without primary antibody. The section was then mounted using Fluoromount®.

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

For IHC staining systems (automated and non-automated), customers should optimize variable parameters such as antibody concentrations and incubation times.

*Tissue obtained from Charles River.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD43 antibody [W3/13] - BSA and Azide free (ab244559)

CD43 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-CD43 antibody

This data was developed using the same antibody clone in a different buffer formulation containing PBS and sodium azide (ab22351)
IHC image of CD43 staining in a section of formalin-fixed paraffin-embedded normal rat spleen* performed on a Leica BOND™ system using the standard Protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20mins. The section was then incubated with ab22351, 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 hematoxylin 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 Charles River.

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