abcam

ab17080

Anti-CD15 antibody [MMA]

Key facts

Isotype	IgM
Host species	Mouse
Storage buffer	Preservative: 0.02% Sodium azide Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Cell preparation containing U937 protein. The exact immunogen used to generate this antibody is proprietary information.
Clone number	MMA
Light chain type	kappa
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	1 µg/mL
Notes	-

Flow Cyt

Tested

Species	Human
Dilution info	1 µg/mL
Notes	-

IHC-Fr

Tested

Species	Human
Dilution info	1 µg/mL
Notes	-

Target data

See full target information CD15

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

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

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	CD15 also known as Lewis x or 3-fucosyl-N-acetyllactosamine is a carbohydrate antigen with a molecular mass typically not individually defined due to its nature as a glycan. CD15 is expressed on the surface of many human cells including neutrophils and various epithelial cells. It is commonly associated with granulocytes and is used as a cell surface marker. The presence of CD15 can be identified using CD15 antibodies through techniques such as CD15 flow cytometry and CD15 APC labeling.
Biological function summary	CD15 is important in cell-cell interaction mechanisms. It plays a role in mediating adhesion processes particularly in immune responses where it aids neutrophils in adhering to vascular endothelium and transmigrating to sites of infection or inflammation. As a glycoconjugate CD15 forms part of a larger glycoprotein complex on the cell surface interacting with other proteins to facilitate cellular responses and movement.
Pathways	CD15's function as an adhesion molecule ties into key cellular processes such as the selectin pathway. In this pathway it interacts with proteins like E-selectin and L-selectin contributing to leukocyte rolling and extravasation during the immune response. Additionally CD15 is implicated in the signaling pathways that mediate inflammatory responses where its role in neutrophil dynamics is important.
Associated diseases and disorders	CD15 has notable implications in Hodgkin's lymphoma and certain myeloid leukemias. It is frequently used as a diagnostic marker in these conditions where its overexpression or abnormal expression patterns may signify disease presence or progression. CD15's interaction with other proteins such as CD30 in Hodgkin's lymphoma highlights its utility in understanding the pathological mechanisms and potential therapeutic targets of these disorders.

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

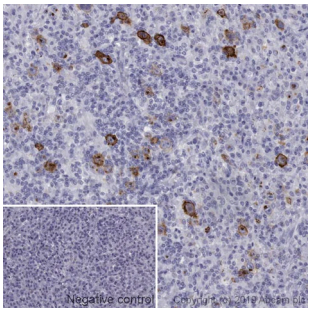
We do not recommend this combination. It is not covered by our product promise.

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.

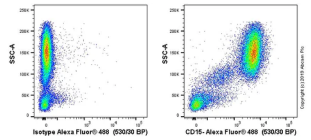
3 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD15 antibody [MMA] (ab17080)

CD15 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-CD15 antibody

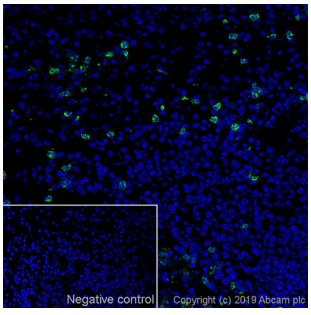
IHC image of CD15 staining in Human tonsil formalin fixed paraffin embedded tissue section*. The section was pre-treated using pressure cooker heat mediated antigen retrieval with sodium citrate buffer (pH6). The section was incubated with ab17080, 1µg/ml, for 15 mins at room temperature. A Goat polyclonal Secondary Antibody to Mouse IgM secondary antibody (ab97230) was used to detect the primary, and visualized using an HRP conjugated ABC system. The section was counterstained with haematoxylin and mounted with DPX.
*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre



Flow Cytometry - Anti-CD15 antibody [MMA] (ab17080)

CD15 Flow Cytometry staining using mouse Anti-CD15 antibody

Human whole blood stained with ab17080 (right) or mouse IgM isotype control ab91545 (left). Red blood cells of 200ul human whole blood were lysed, then cells were incubated for 30 min on ice in 1x PBS containing 10ug/ml human IgG and 10 % normal goat serum to block FC receptors and non-specific protein-protein interaction followed by the antibody (ab17080) or IgM isotype control (ab91545) (100ul at 1ug/ml) for 30 min on ice.
The secondary antibody Goat Anti-Mouse IgM mu chain (Alexa Fluor® 488) (ab150121) was used at 1/2000 dilution for 30 min at 4° C. Acquisition of >30,000 events were collected using a 50 mW Blue laser (488nm) and 530/30 bandpass filter. Events were collected with the forward and side light-scatter characteristics of viable cells.



Immunohistochemistry (Frozen sections) - Anti-CD15 antibody [MMA] (ab17080)

CD15 Immunohistochemistry (Frozen sections) staining using mouse Anti-CD15 antibody

IHC image of CD15 staining in a section of frozen normal human 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 ab17080 at 1µg/ml. The section was then incubated with ab150117 (Goat Anti-Mouse IgG H&L (Alexa Fluor® 488), 1/1000)) (shown in green) for 1 hour at room temperature. DAPI was used to

stain the cell nuclei (blue) at a concentration of 1.43µM. The secondary-only control insert 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 the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre.

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