abcam

**ab241552**

# Anti-CD15 antibody [153B]

## Key facts

| | |
|---|---|
| **Isotype** | IgM |
| **Host species** | Mouse |
| **Storage buffer** | Preservative: 0.02% Sodium azide Constituents: PBS |
| **Form** | Liquid |
| **Clonality** | Monoclonal |
| **Immunogen** | The exact immunogen used to generate this antibody is proprietary information. |
| **Clone number** | 153B |
| **Concentration** | 1 mg/mL The concentration of this product may be batch-dependent<br>Batch concentration finder → |

## Reactivity data

### IHC-P

**Tested**

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 5 µg/mL |
| **Notes** | Perform heat-mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. |

### Flow Cyt

**Tested**

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1 µg/mL |
| **Notes** | - |

## ICC/IF

**Tested**

| | |
|---|---|
| **Species** | Human |
| **Dilution info** | 1-5 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**

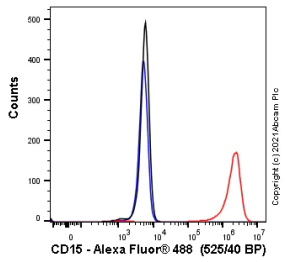
We do not recommend this combination. It is not covered by our product promise.

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.

## 4 product images

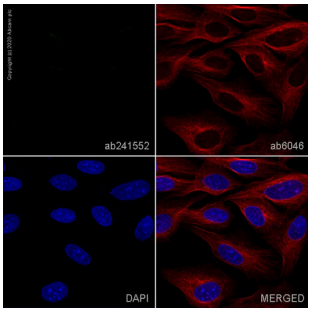



### Flow Cytometry - Anti-CD15 antibody [153B] (ab241552)

CD15 Flow Cytometry staining using mouse Anti-CD15 antibody

Flow cytometry overlay histogram showing staining of human whole blood with ab241552 (red) or mouse IgGM (ab91545) isotype (black). Red blood cells of 200 µl blood were lysed, then cells were incubated for 30 min on ice in 1x PBS containing 10 µg/ml human IgG and 10% normal goat serum to block FC receptors and non-specific protein-protein interaction followed by the antibody (ab241552) or mouse IgGM (ab91545) isotype ($1x10^6$ in 100 µl; at 1 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. Unlabelled sample (blue line) was also used as a control.

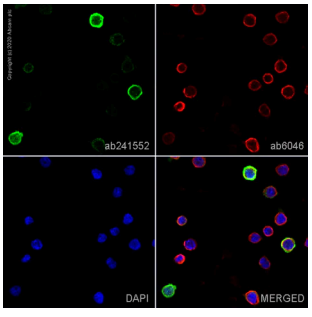
Acquisition of >30000 events were collected using a 50 mW Blue laser (488nm) and 525/40 bandpass filter.




### Immunocytochemistry/ Immunofluorescence - Anti-CD15 antibody [153B] (ab241552)

CD15 Immunocytochemistry/ Immunofluorescence staining using mouse Anti-CD15 antibody

ab241552 showing negative staining for CD15 in U2OS cells (NEGATIVE CELL LINE). The cells were fixed with 100% MeOH (5min), 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 ab241552 at 5µg/ml and ab6046, Rabbit polyclonal to beta Tubulin - Loading Control, at 1/1000 dilution. Cells were then incubated with ab150117, Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) 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 pseudocolor red). Nuclear DNA was labelled with DAPI (shown in blue).
Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

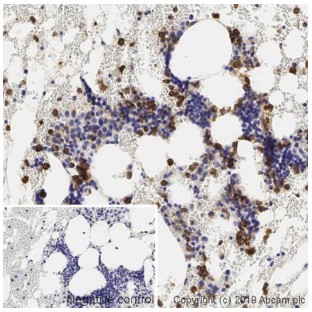



### Immunocytochemistry/ Immunofluorescence - Anti-CD15 antibody [153B] (ab241552)

CD15 Immunocytochemistry/ Immunofluorescence staining using mouse Anti-CD15 antibody

ab241552 staining CD15 in THP-1 cells. The cells were fixed with 4% PFA (10min), 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 ab241552 at 5µg/ml and ab6046, Rabbit polyclonal to beta Tubulin - Loading Control, at 1/1000 dilution. Cells were then incubated with ab150117, Goat Anti-Mouse IgG H&L (Alexa Fluor® 488) 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 pseudocolor red). Nuclear DNA was labelled with DAPI (shown in blue).
Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).




## Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD15 antibody [153B] (ab241552)

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

IHC image of CD15 staining in a section of formalin-fixed paraffin-embedded normal human bone marrow* 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 ab241552, 5µg/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 the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre.

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