abcam

ab77025

APC Anti-CD52 antibody [HI186]

Anti-CD52 antibody [HI186] conjugated to APC - suitable for flow cytometry, IHC-P, and reacts with human samples. Clone [HI186] is a mouse monoclonal antibody cited in 10 publications.

Key facts

Isotype	IgG2b
Host species	Mouse
Conjugation	APC
Excitation/Emission	Ex: 650nm, Em: 660nm
Storage buffer	pH: 7.4 Preservative: 0.097% Sodium azide Constituents: PBS, 0.2% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	Tissue preparation containing CD52 protein. The exact immunogen used to generate this antibody is proprietary information. Database link P31358
Clone number	HI186
Purification technique	Size-exclusion chromatography
Purification notes	ab77025 is purified by size exclusion chromatography and adjusted fordirect use.

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	10 µL for 10^6 Cells

Notes	ab91534 - Mouse monoclonal IgG2b, is suitable for use as an isotype control with this antibody.

Target data

See full target information CD52

Function	May play a role in carrying and orienting carbohydrate, as well as having a more specific role.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C

Supplementary info

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

Activity summary	CD52 also known as Campath-1 antigen is a glycoprotein that weighs approximately 12 kDa. It is mainly expressed on the surface of lymphocytes monocytes macrophages and some epithelial cells. This protein is also present on T and B cells making it a reliable marker for these immune cells. CD52's role is primarily in cell adhesion and signaling. The anti-CD52 antibody alemtuzumab targets this antigen specifically indicating its utility in clinical applications.
Biological function summary	CD52 plays an essential role in immune response regulation. It is not part of a larger protein complex but interacts dynamically with cell membranes to mediate immune cell activity. By acting as a co-stimulatory molecule for T cells CD52 influences lymphocyte activation and proliferation. This activity becomes significant in modulating immune responses showcasing its importance in immunological pathways.
Pathways	CD52 heavily influences T cell receptor signaling and cytokine production pathways. It interacts with proteins in these pathways to facilitate effective immune surveillance and response. CD52's engagement in these pathways highlights its collaboration with proteins such as CD3 and CD28 which assist in T cell activation and adaptive immunity. Such interactions highlight CD52's role in maintaining immune homeostasis.
Associated diseases and disorders	CD52 has substantial relevance in autoimmune diseases and hematological cancers. Multiple sclerosis is one such autoimmune disorder where aberrant CD52

activity affects disease progression. Alemtuzumab an anti-CD52 monoclonal antibody is often used in treatment emphasizing CD52's clinical significance. In hematological malignancies like chronic lymphocytic leukemia CD52 facilitates abnormal lymphocyte survival and proliferation. CD52's interplay with other cell surface proteins such as CD19 further delineates its role in disease pathology and targeting strategies.

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

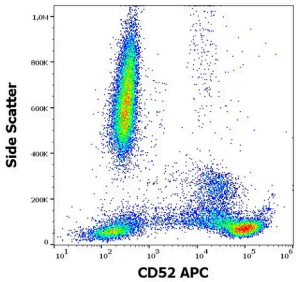
We do not recommend this combination. It is not covered by our product promise.

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In the unlikely event of one of our products not working as expected, you are covered by our product promise.

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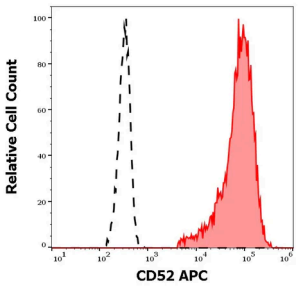
2 product images



Flow Cytometry - APC Anti-CD52 antibody [HI186] (ab77025)

CD52 Flow Cytometry staining of Human peripheral whole blood using mouse Anti-CD52 antibody

Flow cytometry surface staining pattern of human peripheral whole blood stained using ab77025 (10 µl reagent / 100 µl of peripheral whole blood).



Flow Cytometry - APC Anti-CD52 antibody [HI186] (ab77025)

CD52 Flow Cytometry staining of Human peripheral whole blood using mouse Anti-CD52 antibody

Separation of human CD52 positive lymphocytes (red-filled) from neutrophil granulocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using ab77025 (10 µl reagent / 100 µl of peripheral whole blood).

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