abcam

ab245681

Anti-CD52 antibody [Campath-1H]

Recombinant

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	Preservative: 0.02% Proclin 300 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	Cell preparation containing CD52 protein. The exact immunogen used to generate this antibody is proprietary information. Database link P31358
Clone number	Campath-1H
Purification technique	Affinity purification Protein A
Light chain type	kappa
Concentration	1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Tested

Species	Cynomolgus monkey
Dilution info	1 µg/mL
Notes	-

Species	Rhesus monkey
Dilution info	1 µg/mL
Notes	-

Expected

Species	Rat, Human
Dilution info	Use at an assay dependent concentration.
Notes	-

IHC-P

Tested

Species	Rat
Dilution info	5 µg/mL
Notes	-

Species	Human
Dilution info	5 µg/mL
Notes	-

Expected

Species	Cynomolgus monkey, Rhesus monkey
Dilution info	Use at an assay dependent concentration.
Notes	-

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 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

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.

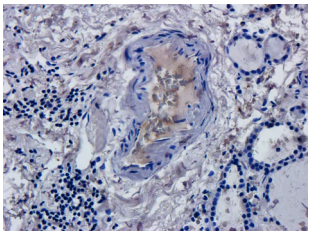
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In the unlikely event of one of our products not working as expected, you are covered by our product promise.

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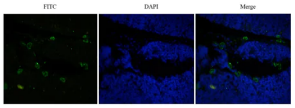
7 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD52 antibody [Campath-1H] (ab245681)

CD52 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-CD52 antibody

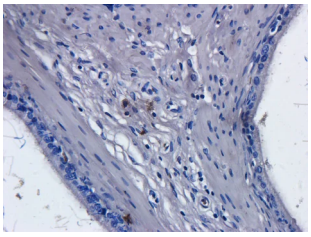
Formalin-fixed human thyroid cancer tissue stained for CD52 with ab245681 at 5 µg/ml in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CD52 antibody [Campath-1H] (ab245681)

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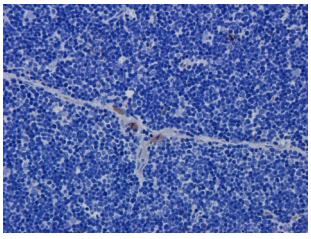
Rat thymus tissue stained for CD52 with ab245681 at 5 µg/ml followed by an FITC conjugated secondary antibody in immunohistochemical analysis. The nuclear stain is DAPI (blue).



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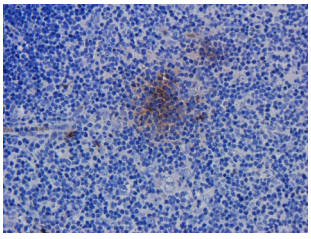
Formalin-fixed, paraffin-embedded rat epididymis tissue stained for CD52 with ab245681 at 5 µg/ml in immunohistochemical analysis.



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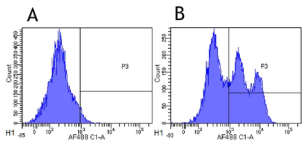
Formalin-fixed, paraffin-embedded rat thymus tissue stained for CD52 with ab245681 at 5 µg/ml in immunohistochemical analysis.



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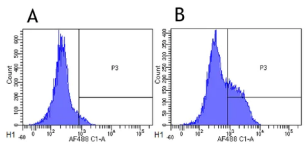
Formalin-fixed, paraffin-embedded rat spleen tissue stained for CD52 with ab245681 at 5 µg/ml in immunohistochemical analysis.



Flow Cytometry - Anti-CD52 antibody [Campath-1H] (ab245681)

CD52 Flow Cytometry staining using rabbit Anti-CD52 antibody

Flow-cytometry using ab245681.
Cynomolgus monkey lymphocytes were stained with an isotype control (Panel A) or ab245681 (Panel B) at a concentration of 1 µg/ml for 30 mins at RT. After washing, bound antibody was detected using an AF488 conjugated donkey anti-rabbit antibody (ab150073).



Flow Cytometry - Anti-CD52 antibody [Campath-1H] (ab245681)

CD52 Flow Cytometry staining using rabbit Anti-CD52 antibody

Flow-cytometry using ab245681.
Rhesus monkey lymphocytes were stained with an isotype control (Panel A) or ab245681 (Panel B) at a concentration of 1 µg/ml for 30 mins at RT. After washing, bound antibody was detected using an AF488 ® conjugated donkey anti-rabbit antibody (ab150073).

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