abcam

ab33082

PE Anti-CD52 antibody [YTH34.5]

Anti-CD52 antibody [YTH34.5] conjugated to PE - suitable for flow cytometry, and reacts with human samples. Clone [YTH34.5] is a rat monoclonal antibody cited in 17 publications.

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Key facts

Isotype	IgG2b
Host species	Rat
Conjugation	PE
Excitation/Emission	Ex: 480;565nm, Em: 578nm
Storage buffer	Preservative: 0.09% Sodium azide Constituents: PBS, 1% BSA
Form	Liquid
Clonality	Monoclonal
Clone number	YTH34.5
Purification technique	Affinity purification Protein A
Purification notes	Purified IgG prepared from tissue culture supernatant.

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1/1

Notes	ab136585 - Rat 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

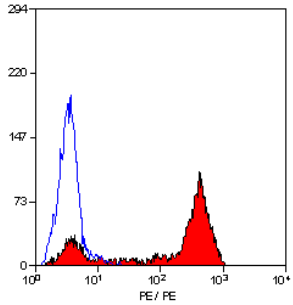
We do not recommend this combination. It is not covered by our product promise.

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1 product image



Flow Cytometry - PE Anti-CD52 antibody [YTH34.5] (ab33082)

CD52 Flow Cytometry staining using rat Anti-CD52 antibody

Staining of human peripheral blood lymphocytes with 10ul NEAT ab33082 for 10^6 cells per 100ul.

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