Product datasheet

Anti-CD19 antibody [2E2B6B10] ab31947

Overview

Product name  Anti-CD19 antibody [2E2B6B10]
Description  Mouse monoclonal [2E2B6B10] to CD19
Host species  Mouse
Tested applications  Suitable for: Flow Cyt, ICC/IF, WB, IHC-P, IHC-Fr, ELISA
Species reactivity  Reacts with: Human, Recombinant fragment
Immunogen  Recombinant full length protein corresponding to Human CD19.
Positive control  Recombinant human CD19 and normal human lymph node tissue.

Properties

Form  Liquid
Storage instructions  Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer  Preservative: 0.05% Sodium azide
                Constituent: PBS
Purity  Protein G purified
Purification notes  Purified from tissue culture supernatant.
Clonality  Monoclonal
Clone number  2E2B6B10
Isotype  IgG2a

Applications

Our Abpromise guarantee covers the use of ab31947 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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<td>Flow Cyt</td>
<td>⭐⭐⭐⭐⭐</td>
<td>Use 10µl for 10^6 cells. ab170191 - Mouse monoclonal IgG2a, is suitable for use as an isotype control with this antibody.</td>
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Function

Assembles with the antigen receptor of B lymphocytes in order to decrease the threshold for antigen receptor-dependent stimulation.

Involvement in disease

Defects in CD19 are the cause of immunodeficiency common variable type 3 (CVID3) [MIM:613493]; also called antibody deficiency due to CD19 defect. CVID3 is a primary immunodeficiency characterized by antibody deficiency, hypogammaglobulinemia, recurrent bacterial infections and an inability to mount an antibody response to antigen. The defect results from a failure of B-cell differentiation and impaired secretion of immunoglobulins; the numbers of circulating B cells is usually in the normal range, but can be low.

Sequence similarities

Contains 2 Ig-like C2-type (immunoglobulin-like) domains.

Post-translational modifications

Phosphorylated on serine and threonine upon DNA damage, probably by ATM or ATR. Phosphorylated on tyrosine following B-cell activation.

Cellular localization

Membrane.

Images

Overlay histogram showing peripheral blood lymphocytes stained with ab31947 (red line). The cells were incubated with the antibody (ab31947, 10µl/1x10^6 cells) for 30 min at 4°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 4°C. Isotype control antibody (black line) was mouse IgG2a [ICIGG2A] (ab91361, 2µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed gating on peripheral blood lymphocytes.
Immunohistochemical staining of paraffin embedded normal human, adult lymph node tissue, using ab31947. Showing cytoplasmic staining. Secondary staining was carried out using an HRP conjugated antibody before colour development using DAB.

ab31947 staining CD19 in the peripheral blood mononuclear cells from Human by ICC/IF (Immunocytochemistry/Immunofluorescence). Cells were fixed with paraformaldehyde, permeabilized with 0.5% Triton X-100 in PBS and blocked with 5% serum for 20 minutes at 25°C. Samples were incubated with primary antibody (1/250 in PBS + 1% goat serum) for 16 hours at 4°C. A Cy3®-conjugated Goat anti mouse polyclonal was used as the secondary antibody.

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