SONY

Product Data Sheet

PE/Dazzle™ 594 anti-human CD22

Catalog # / Size: 2112645 / 25 tests
2112650 / 100 tests

Clone: HIB22

Isotype: Mouse IgG1, κ

Immunogen: Synthetic peptide from human EGFR

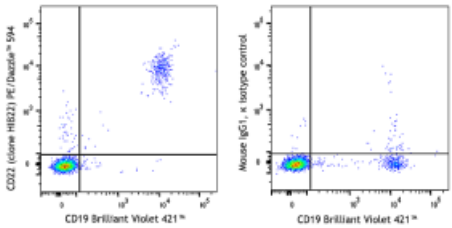
Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)

Workshop Number: V CD22.14

Concentration: Lot-specific



Human peripheral blood lymphocytes were stained with CD19 Brilliant Violet 421™ and CD22 (clone HIB22) PE/Dazzle™ 594 (left), or mouse IgG1, κ PE/Dazzle™ 594 isotype control (right).

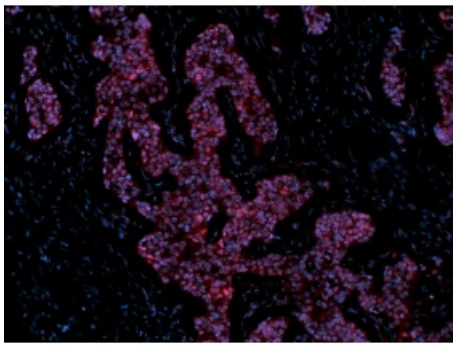
Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 µL per million cells in 100 µL staining volume or 5 µL per 100 µL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

* PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm.

Application Notes: Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections.



Formalin-fixed paraffin-embedded human breast cancer tissue slices were deparaffinized and rehydrated. Antigen retrieval was done with Tris-Buffered Saline 1X (1.0 M, pH 7.4) at 95°C for 40 minutes, washed with PBS/0.05% Tween 20 twice for five minutes, permeabilized with 0.5% Triton X-100 for ten minutes, and blocked with 5% FBS and 0.2% gelatin for 30 minutes. Then, the slices were stained with 5 µg/mL anti-EGFR (clone A19002A) Alexa Fluor® 647 (red) at 4°C overnight. Nuclei were counterstained with DAPI (green). The image was captured with a 10X objective.

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Application References:

1. Schlossman S, et al. Eds. 1995. Leukocyte Typing V: White Cell Differentiation Antigens. Oxford University Press. New York.
2. Clark E. 1993. *J. Immunol*. 150:4715.
3. Shan D and O. Press. 1995. *J. Immunol.* 154:4466.

Description: CD22 is a 130 kD type I transmembrane glycoprotein also known as Siglec-2 and BL-CAM. It is a member of the immunoglobulin superfamily (sialoadhesion subgroup). CD22 is expressed in the cytoplasm of pro-B and pre-B cells, and on the surface of mature B and activated B cells, but not on plasma cells. CD22 is present in the B cell receptor complex and associates with SHP-1, Syk, Lck, Lyn, and phospholipase Cγ1. A primary function of CD22 is thought to be in limiting antigen receptor signaling by modulating B cell activation threshold. CD22 has been shown to bind to CD45RO and CD75, although the natural ligands for this molecule remain controversial.

Antigen References:

1. Clark E. 1993. *J. Immunol.* 150:4715.
2. Shan D, *et al.* 1995. *J. Immunol.* 154:4466.

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