

# APC/Cyanine7 anti-human CD22

**Catalog # /** 2112640 / 100 tests  
**Size:** 2112635 / 25 tests

**Clone:** HIB22

**Isotype:** Mouse IgG1,  $\kappa$

**Immunogen:** Synthetic peptide from human EGFR

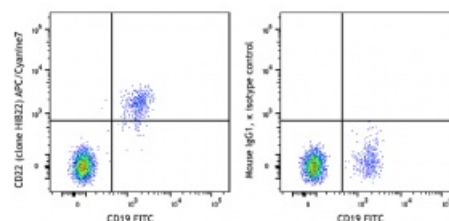
**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography and conjugated with APC/Cyanine7 under optimal conditions.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA)

**Workshop Number:** V CD22.14

**Concentration:** Lot-specific



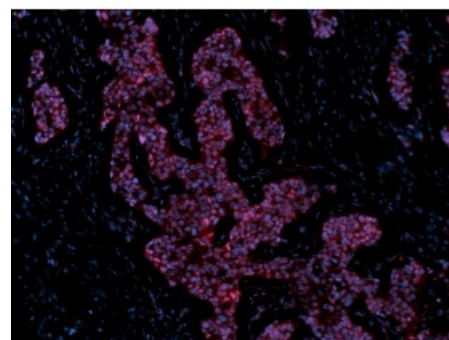
Human peripheral blood lymphocytes were stained with CD19 FITC and CD22 (clone HIB22) APC/Cyanine7 (left) or mouse IgG1,  $\kappa$  APC/Cyanine7 isotype control (right).

## 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  $\mu$ L per million cells in 100  $\mu$ L staining volume or 5  $\mu$ L per 100  $\mu$ L of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

**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  $\mu$ g/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.

**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.

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**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 Cy1. 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.