Rat Anti-Mouse CD22

Overview

Clone 2D6 (NIM-R6)
Isotype Rat (LOU) IgG1κ
Immunogen Splenic lymphocyte plasma membranes from CBA x C57 F1 mice
Specificity Mouse CD22; Mr 150 kDa
Alternate Name(s) Lyb-8, Leu-14, BL-CAM

Description

CD22, also known as Lyb-8, is a heterodimeric transmembrane glycoprotein and a member of a structurally related group of immunoglobulin (Ig) superfamily domain-containing proteins called the sialoadhesin family. It is detected in the cytoplasm early in B cell development (late pro-B cell stage), appears on the cell surface concomitant with IgD, and is found on most IgM+IgD+ mature B lymphocytes. Expression is lost with terminal differentiation of B cells and is absent on plasma cells. Activation of B cells via cross-linking of surface Ig increases CD22 expression. CD22 associates with the B cell receptor (BCR) complex and mediates intercellular adhesion. Its intracellular domain is phosphorylated after antigen receptor cross-linking and is involved in negative regulation of B cell activation.

Applications

FC – Quality tested 1,6-8
IHC-FS – Reported in literature 4
IHC-PS – Reported in literature 3
ICC – Reported in literature 5
IP – Reported in literature 1,2
Activ – Reported in literature 9

Working Dilutions

Flow Cytometry FITC and BIOT conjugates ≤ 1 μg/10⁶ cells
PE, APC, and SPRD conjugates ≤ 0.2 μg/10⁶ cells
For flow cytometry, the suggested use of these reagents is in a final volume of 100 μL

Other Applications Since applications vary, you should determine the optimum working dilution for the product that is appropriate for your specific need.
Handling and Storage

- The purified (UNLB) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of borate buffered saline, pH 8.2. No preservatives or amine-containing buffer salts added. Store at 2-8°C.
- The fluorescein (FITC) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN3. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN3. Store at 2-8°C.
- The R-phycoerythrin (PE) and allophycocyanin (APC) conjugates are supplied as 0.1 mg in 1.0 mL of PBS/NaN3 and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The R-phycoerythrin (PE) and allophycocyanin (APC) conjugates are supplied as 0.1 mg in 1.0 mL of PBS/NaN3 and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The Spectral Red® (SPRD) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN3 and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The low endotoxin, azide-free (LE/AF) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of PBS. **Aliquot and store at or below -20°C.**
- Protect fluorochrome-conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

Warning

Some reagents contain sodium azide. Please refer to product specific (M)SDS.

References

7. O’Reilly MK, Tian H, Paulson JC. CD22 is a recycling receptor that can shuttle cargo between the cell surface and endosomal compartments of B cells. J Immunol. 2011;186:1554-63. (FC)

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