

## Monoclonal Antibody to CD22 - PE

<b>Alternate names:</b>	B-cell receptor CD22, B-lymphocyte cell adhesion molecule, BL-CAM, Leu-14, SIGLEC2, Sialic acid-binding Ig-like lectin 2, Siglec-2
<b>Catalog No.:</b>	AM08033RP-N
<b>Quantity:</b>	0.1 mg
<b>Concentration:</b>	0.1 mg/ml
<b>Background:</b>	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. (Ref.1,2) CD22 associates with the B cell receptor (BCR) complex and mediates intercellular adhesion. (Ref.2-4) Its intracellular domain is phosphorylated after antigen receptor crosslinking and is involved in negative regulation of B-cell activation. (Ref.6-9)
<b>Uniprot ID:</b>	<a href="#">P35329</a>
<b>NCBI:</b>	<a href="#">NP_001036782.1</a>
<b>GeneID:</b>	<a href="#">12483</a>
<b>Host / Isotype:</b>	Rat / IgG1
<b>Clone:</b>	2D6
<b>Format:</b>	<b>State:</b> Liquid purified Ig fraction. <b>Buffer System:</b> PBS containing 0.09% Sodium Azide as preservative and a stabilizing agent. <b>Label:</b> PE – R-Phycoerythrin
<b>Applications:</b>	<b>Flow Cytometry:</b> < / = 0.2 µg/10e6 cells. (Ref.2) Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	This antibody is specific to CD22 (Mr 150 kDa), a B Lymphocyte Adhesion Molecule. <b>Species:</b> Mouse. Other species not tested.
<b>Storage:</b>	Store the antibody undiluted at 2-8°C. <b>DO NOT FREEZE!</b> This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

- General Readings:**
1. Symington, F.W., B. Subbarao, D.E. Mosier, and J. Sprent. 1982. Immunogenetics 16:381.
  2. Torres, R.M., C-L. Law, L. Santos-Argumedo, P.A. Kirkham, K. Grabstein, R.M.E. Parkhouse, and E.A. Clark. 1992. J. Immunol. 149:2641.
  3. Erickson, L.D., L.T. Tygrett, S.K. Bhatia, K.H. Grabstein, and T.J. Waldschmidt. 1996. Int. Immunol. 8:1121.
  4. Law C.-L. Aruffo, A. Chandran, K.A. Doty, R.T. and Clark, E.A. 1995. J. Immunol. 155:3368.
  5. Law, C.-L., S.P. Sidorenko, and E.A. Clark. 1994. Immunol. Today 15:442.
  6. Pezzutto, A., Dorken, B., Moldenhauer, G. and Clark, E.A. 1988. J. Immunol. 140:1791.
  7. Doody, G.M., L.B. Justement, C.C. Delbrias, R.J. Matthews, J. Lin, M.L. Thomas, and D.T. Fearon. 1995. Science 269:242.
  8. Law, C.-L., S.P. Sidorenko, K.A. Chandran, Z. Zhao, S.-H. Shen, E.H. Fischer, and E.A. Clark. 1996. J. Exp. Med. 183:547.
  9. O'Keefe, T.L., G.T. Williams, S.L. Davies, and M.S. Neuberger. 1996. Science 274:798.

**Pictures:**

**Immunofluorescent Staining:** BALB/c splenocytes were double-stained with Rat anti-Mouse CD22-R-PE and Rat anti-Mouse CD19-FITC (Clone 6D5). Small lymphocytes were gated and analyzed on a FACScan(TM) flow cytometer (BDIS, San Jose, CA). Amount Used: 0.3 µg/10e6 cells.

