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# Product Data Sheet

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## PE/Cyanine7 anti-human CD22

<b>Catalog # / Size:</b>	2417590 / 100 tests 2417585 / 25 tests	□ Human peripheral blood lymphocytes were stained with CD19 APC and CD22 (clone S-HCL-1) PE/Cyanine7 (left) or mouse IgG2b, κ PE/Cyanine7 isotype control (right).
<b>Clone:</b>	S-HCL-1	
<b>Isotype:</b>	Mouse IgG2b, κ	
<b>Immunogen:</b>	Mouse IL-9R transfectants	
<b>Reactivity:</b>	Human	
<b>Preparation:</b>	The antibody was purified by affinity chromatography and conjugated with PE/Cy7 under optimal conditions. The solution is free of unconjugated PE/Cy7 and unconjugated antibody.	
<b>Formulation:</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).	
<b>Workshop Number:</b>	IV P38	
<b>Concentration:</b>	Lot-specific	

## 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.

**Application Notes:**

1. Nitschke L. 2005. *Curr. Opin. Immunol.* 17:290
2. Foon Ka, *et al.* 1986. *Blood.* 68:297
3. Schwarting R, *et al.* 1985. *Blood.* 65:974
4. Campana D, *et al.* 1985. *J. Immunol.* 134:1524

**Application References:**

1. Knapp W, *et al.* 1989. *Leucocyte Typing IV.* Oxford University Press. New York.
2. McCarty OJT, *et al.* 2000. *Blood* 96:1789.
3. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
4. Zhi L *et al.* 2013. *PLoS One.* 8:e79869. (IHC)

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**Description:** CD22 is a 130 kD type I transmembrane glycoprotein also known as Siglec-2 and BL-CAM and 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.