

# anti-human CD22

## Monoclonal Antibody MEM-01 to CD22 (Human)

Cat-No: **21270221**

100 µg in 100 µl

**Clone:** MEM-01

**Specificity:** The antibody MEM-01 reacts with CD22 (BL-CAM), a 130 kDa type I transmembrane glycoprotein (immunoglobulin superfamily) expressed in the cytoplasm of pro-B and pre-B lymphocytes, and on the surface of mature and activated B lymphocytes; it is lost on plasma cells, peripheral blood T lymphocytes, granulocytes and monocytes. The antibody MEM-01 cross-blocks the antibody OTH228 that recognizes uniquely epitope "E"; it does not cross-block antibodies RFB-4, CLB22/1 and CLB-BLy1.

**Isotype subclass:** Mouse IgG1

**Form:** Purified from ascites by protein-A affinity chromatography.

**Purity:** > 95% (by SDS-PAGE)

**Physical state:** Liquid

**Buffer/Additives/Preservative:** PBS containing 0.09 % sodium azide (pH 7.2).

**Expiration date:** The reagent is stable until the expiry date stated on the vial label.

**Storage conditions:** Store at 4 °C. For long-term storage aliquot and store at -20°C. Avoid freeze/thaw cycles.

**Application:** Flow Cytometry  
Immunoprecipitation  
Western Blotting: The antibody MEM-01 stains only the zone corresponding to 140 kDa, but not the weaker 130 kDa zone (stained by several CD22 antibodies recognizing both isoforms).

**Background:** **CD22**, also known as Siglec-2 (sialic acid-binding immunoglobulin-like lectin-2) is a transmembrane glycoprotein binding alpha2,6-linked sialic acid-bearing ligands. Intracellular domain of CD22 recruits protein tyrosine phosphatase SHP-1 through the immunoreceptor tyrosine-based inhibitory motifs (ITIMs), thus setting a threshold for B cell receptor-mediated activation. CD22 also regulates B-cell response by involvement in controlling the CD19/CD21-*Src*-family protein tyrosine kinase amplification pathway and CD40 signaling. CD22 exhibits hallmarks of clathrin-mediated endocytic pathway.

**References:** \*Tedder TF, Poe JC, Haas KM: CD22: . Adv Immunol. 2005;88:1-50.  
\*Tateno H, Li H, Schur MJ, Bovin N, Crocker PR, Wakarchuk WW, Paulson JC: . Mol Cell Biol. 2007 Aug;27(16):5699-710.  
\*Walker JA, Smith KG: Immunology. 2007 Dec 7

**Warning:** Sodium azide is harmful if swallowed (R22). Keep out of reach of children (S2). Keep away from food, drink and animal feeding stuff (S13). Wear suitable protective clothing (S36). If swallowed, seek medical advice immediately and show this container or label (S46). Contact with acids liberates very toxic gas (R32). Azide compounds should be flushed with large volumes of water during disposal to avoid deposits in lead or copper plumbing where explosive conditions can develop.

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

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Gladiolenweg 2; 26169 Friesoythe; Germany  
phone:+49-(0)4491-400997, fax:+49-(0)4491-400998, info@immunotools.com  
www.immunotools.com