

Anti-CD22 [hL22 (Epratuzumab)] Standard Size Ab00728-37.0

This chimeric rhesus macaque antibody was made using the variable domain sequences of the original Human IgG1 format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Rhesus macaque IgG4, Kappa

Clone Number: hL22 (Epratuzumab)

Alternative Name(s) of Target: Leu14; B-cell receptor CD22; B-lymphocyte cell adhesion molecule; BL-CAM; Sialic acid-binding Ig-like lectin 2; Siglec-2; T-cell surface antigen Leu-14

UniProt Accession Number of Target Protein: P20273

Published Application(s): Blocking, IP, FC

Published Species Reactivity: Human, Rhesus Monkey, Cynomolgus Monkey

Immunogen: This antibody was prepared by the humanization of LL2 (EPB-2), a murine anti-CD22 IgG2a raised against Raji Burkitt lymphoma cells. Murine sequences comprise 5-10% of the molecule, with the remainder being human framework sequences, which greatly reduces the potential for immunogenicity (Traczewski, 2010).

Specificity: This antibody is specific for the 3rd Ig-like domain of human CD22 (epitope B), a cell surface glycoprotein present on mature B-cells and on many types of malignant B-cells.

Application Notes: Epratuzumab binds to the third extracellular domain of CD22, inducing CD22 phosphorylation, resulting in negative modulation of BCR activation, and rapid CD22 internalization, leading to modulation of B-cell homing (Traczewski, 2010). Initial phase II and two terminated early phase III studies suggest that the use of this antibody to treat systemic lupus erythematosus is effective and well tolerated, but both phase III trials failed to meet primary clinical efficacy endpoints. Additionally, in vitro studies and clinical trials indicate that this antibody can be used in combination therapy with another inhibitor of B-cell activity, rituximab (anti-CD20), in the treatment of non-Hodgkin lymphoma (Traczewski, 2010).

Antibody First Published in: Pawlak-Byczkowska et al., Leung et al. Two new monoclonal antibodies, EPB-1 and EPB-2, reactive with human lymphoma & Construction and characterization of a humanized, internalizing, B-cell (CD22)-specific, leukemia/lymphoma antibody, LL2 Cancer research, 15 August 1989, Vol.49(16), pp.4568-77 & Molecular Immunology, 1995, Vol.32(17), pp.1413-1427 [PMID:](#)

Note on publication: Pawlak-Byczkowska et al (1989) describes the use of LL2 (EPB-2) in IHC analysis to stain malignant lymphoma tissue sections. Leung et al (1995) describes the generation of a humanized LL2

antibody.

Product Form

Size: 200 µg Purified antibody.

Purification: Purified by Immobilized Metal Affinity Chromatography

Supplied In: PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.