anti-human CD20

Monoclonal Antibody LT20 to CD20 (Human)

Cat-No: 21279201 100 µg in 100 µl

Clone: LT20

Specificity: The antibody LT20 reacts with CD20 (Bp35), a 33-37 kDa non-glycolysated membrane receptor with four transmembrane domains, expressed on B lymphocytes (it is lost on plasma cells), follicular dendritic cells, and at low levels on peripheral blood T lymphocytes.

Isotype subclass: Mouse IgG2a

Purity: > 95% (by SDS-PAGE)

Form: Purified form ascites by precipitation methods and ion exchange chromatography.

Physical state: Liquid

Buffer/Additives/Preservative: PBS, pH 7.2, containing 0.09% sodium azide.

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

Background: CD20 is a cell surface 33-37 (depending on the degree of phosphorylation) kDa non-glycosylated surface phosphoprotein expressed on mature and most malignant B cells, but not stem cells or plasma cells (low number of the Cd20 has been also detected on a subpopulation of T lymphocytes and it can be expressed on follicular dendritic cells). Its expression on B cells is synchronous with the expression of surface IgM. CD20 regulates transmembrane calciumconductance (probably functioning as a component of store operated calcium channel), cell cycle progression and B-cell proliferation. It is associated with lipid rafts, but the intensity of this association depends on extracellular triggering, employing CD20 conformational change and/or BCR (B cell antigen receptor) aggregation. After the receptor ligation, BCR and CD20 colocalize and then rapidly dissociate before BCR endocytosis, whereas CD20 remains at the cell surface. CD20 serves as a useful target for antibody-mediated therapeutic depletion of B cells, as it is expressed at high levels on most B-cell malignancies, but does not become internalized or shed from the plasma membrane following mAb treatment.

References

*) Leucocyte Typing VII. Mason D. et al. (Eds.), Oxford University Press (2002).
*) Olyak MJ,Deans JP.: Cancer Res. 2003 Sep 1;63(17):5480-9.
*) Teeling JL, Mackus WJ, Wiegmann LJ, van den Brackel JH,Beers SA, French RR, van Meerten T, Ebeling S,Vink T, Slootstra JW,Parren PW,Glennie MJ, van de Winkel JG.: J Immunol. 2006 Jul 1;177(1):362-71.

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.

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