

11-414-C025

Monoclonal Antibody to CD20 Purified Antibody (0.025 mg)

Clone: LT20

Isotype: Mouse IgG2a

Specificity: The antibody LT20 reacts with CD20 (Bp35), a 33-37 kDa non-glycosylated

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.

Regulatory Status: RUO

Immunogen: Normal human lymphocytes from lymph node.

Species Reactivity: Human

Application: Flow Cytometry

Recommended dilution:3 µg/ml

Purity: > 95% (by SDS-PAGE)

Purification: Purified by precipitation and chromatography

Concentration: 1 mg/ml

Storage Buffer: Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4

Storage / Stability: Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial

label.

Expiration: See vial label

Lot Number: See vial label

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 lgM. CD20 regulates transmembrane calcium conductance (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.



PRODUCT DATA SHEET

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