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Purified Mouse Anti-Human CD38 Monoclonal Antibody

CLX42AP

Lot:

Clone: HIT2

Isotype: Mouse IgG1

Specificity: The antibody HIT2 reacts with CD38 (T10), a 45 kDa type II transmembrane glycoprotein strongly expressed mainly on plasma cells and activated T and B lymphocytes; it is an antigenic marker of lymphoid cells.
HLDA III; WS Code T 155

Immunogen: Human thymocytes in foetus

Species Reactivity: Human

Preparation: Purified from ascites by protein-G affinity chromatography.

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

Storage / Stability: Store at 2-8°C. Do not use after expiration date stamped on vial label. For long-term storage aliquot and store at -20°C. Avoid freeze/thaw cycles.

Usage: **Flow Cytometry**

Western Blotting

Recommended dilution: 2 mg/ml

Positive control: RAJI human cell line

Sample preparation: Resuspend approx. 50 mil. cells in 1 ml cold Lysis buffer (1% laurylmaltoside in 20 mM Tris/Cl, 100 mM NaCl pH 8.2, 50 mM NaF including Protease inhibitor Cocktail). Incubate 60 min on ice. Centrifuge to remove cell debris. Mix lysate with non-reducing SDS-PAGE sample buffer. Boil for 5 min. Application note: Non-reducing conditions.

Immunohistochemistry (paraffin sections)

Recommended dilution: 10 mg/ml

Immunohistochemistry (frozen sections)

Continued...

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Background:

CD38 (NAD⁺ glycohydrolase) is a type II transmembrane glycoprotein able to induce activation, proliferation and differentiation of mature lymphocytes and mediate apoptosis of myeloid and lymphoid progenitor cells. Another role of CD38 is provided by enzymatic activity of its extracellular part. CD38 acts as NAD⁺ glycohydrolase converting NAD⁺ into ADP-ribose, as ADP-ribosyl cyclase producing cADPR and as cADPR hydrolase, thus affecting levels of calcium-mobilizing metabolites. ADPR produced by CD38 serves as an important second messenger of neutrophil and dendritic cell migration.

References:

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Laboratory Reagent For Research Use Only.