

1B-366-C025

Monoclonal Antibody to CD38 Biotin conjugated (0.025 mg)

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
Regulatory Status:	RUO
Immunogen:	Human thymocytes in foetus
Species Reactivity:	Human
Preparation:	The purified antibody is conjugated with Biotin-LC-NHS under optimum conditions. The reagent is free of unconjugated biotin.
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.
Usage:	The reagent is designed for Flow Cytometry analysis. Suggested working dilution is 1:500. Indicated dilution is recommended starting point for use of this product. Working concentrations should be determined by the investigator.
Expiration:	See vial label
Lot Number:	See vial label
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.

For laboratory research only, not for drug, diagnostic or other use.

**Antibodies****References:**

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- *Leukocyte Typing III., McMichael AJ et al (Eds.), Oxford University Press (1987).
- *Rozková D, Novotná L, Pytlík R, Hochová I, Kozák T, Bartůnková J, Spísek R: Toll-like receptors on B-CLL cells: expression and functional consequences of their stimulation. *Int J Cancer.* 2010 Mar 1;126(5):1132-43.
- *Kolar GR, Mehta D, Pelayo R, Capra JD: A novel human B cell subpopulation representing the initial germinal center population to express AID. *Blood.* 2007 Mar 15;109(6):2545-52.
- *Všianská P, Říhová L, Varmužová T, Suská R, Kryukov F, Mikulášová A, Kupská R, Penka M, Pour L, Adam Z, Hájek R: Analysis of B-cell subpopulations in monoclonal gammopathies. *Clin Lymphoma Myeloma Leuk.* 2015 Apr;15(4):e61-71.

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