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α-CD38 Antibody

(RABBIT; POLYCLONAL; AFFINITY PUR.)

CATALOG NO.: CDA-322

QUANTITY: 100 µg

SOURCE:

CD38 Antibody is an affinity purified rabbit polyclonal antibody raised against a purified recombinant protein consisting of the carboxyl terminal of human CD38.

RECONSTITUTION:

Reconstitute lyophilized CD38 Antibody in 100 µL diH₂O.

CONCENTRATION:

1.0 mg/mL after reconstitution.

PURITY & STERILITY:

CD38 Antibody has been shown to be >95% pure by SDS-PAGE. CD38 Antibody is provided as a non-sterile sample. The product may be rendered sterile by 0.22 µm filtration after reconstitution.

Note: This product is for research use only.

Not for use in clinical or diagnostic procedures.

SPECIFICITY:

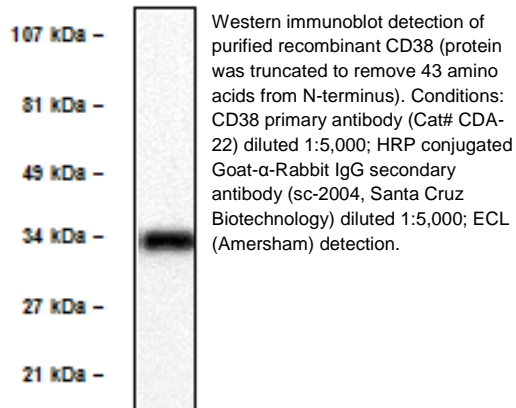
CD38 Antibody reacts specifically with CD38 by Western blotting. Recommended dilution range for Western blot analysis: 1:1,000 - 1:10,000. Starting dilution: 1:5,000.

STORAGE & HANDLING:

Store lyophilized sample at ≤-20°C prior to reconstitution. Lyophilized product is stable for 1 year from date of shipment. Once the antibody has been reconstituted, store at 4°C.
Do Not Freeze!

BACKGROUND:

CD38 is a 45-kDa type II transmembrane glycoprotein that is found in various mammalian tissues and cell types and is capable of converting NAD⁺ into cyclic ADP-ribose (cADPR). This ability is due to the ADP-ribosyl cyclase activity found on the extracellular carboxyl domain of the enzyme. The product, cADPR, possesses calcium mobilizing activity independent of inositol 1,4,5- trisphosphate (IP₃) In addition to cyclizing NAD⁺ to cADPR, CD38 also utilizes NADP⁺ as a substrate and catalyze the exchange of its nicotinamide group with nicotinic acid to produce nicotinic acid adenine dinucleotide phosphate (NAADP), another potent calcium mobilizing metabolite. CD38 is expressed on activated B and T lymphocytes, NK cells, thymocytes, pre-B cells, germinal center B cells, mitogen-activated T cells, monocytes, Ig-secreting plasma cells and



erythrocytes. CD38 is widely used as a marker for B and T lymphocytes activation and differentiation. In addition, CD38 is expressed in myriad cell types of important organs including the liver, eye, spleen and brain. In addition to the role of its metabolites in mobilizing intracellular calcium, CD38 is believed to be playing important immunoregulatory roles including the induction of B and T cells proliferation, regulation of B-cell lymphopoiesis, apoptosis, protein phosphorylation, activation of certain kinases and cytokine release.

REFERENCES:

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ORDERING:

Cat. No.: CDA-322 (100 μ g) α -CD-38 Antibody
 Cat. No.: CDA-791 (1 mg) α -CD38 Antibody



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