PERFORMANCE DATA SHEET
1818

Monoclonal anti-human CD257 (BAFF, Tall-1)*

mAb name/Clone: **ANC2H3**
Isotype: Mouse IgG1κ
Immunogen: Recombinant soluble human CD257

CATALOG#: 266-020
QUANTITY: 100 μg **CONCENTRATION: 1.0 mg/ml**

INFORMATION: Human CD257 (B cell activating factor, BAFF,TALL-1, Blys, THANK) and CD256 (APRIL, a proliferation inducing ligand) are both type II molecules belonging to the TNF superfamily (TNFSFL #13b and 13 respectively). They are expressed by non-B cells, and are down regulated by mitogenic stimulation(2). BAFF and APRIL bind to at least two receptors: CD267 (TACI, transmembrane activator and CAML-interactor) and CD269 (BCMA, B cell maturation antigen), both of which are restricted to B cells(3,4). Ligation of these receptors with recombinant BAFF dramatically increases IgM production by peripheral blood B cells(1). A third receptor CD268 (BAFFR) is specific for BAFF has also been described(5). BAFF and BAFFR knockout mice have a reduced numbers of mature B cells in the periphery, however TACI and BCMA knockouts do not share this phenotype, suggesting that BAFF-R may the primary receptor for BAFF in mice(8,9,10). Cell surface BAFF can be proteolytically cleaved to form a soluble trimeric molecule(2). Levels of soluble BAFF correspond with levels of autoantibodies in Sjogren's Syndrome(11). Clone ANC2H3 blocks binding of recombinant human CD257(BAFF) to receptors on Raji cells in Flow Cytometry.

References: 1) Schneider P., J. Tschopp, et al. *J. Exp. Med*. 1999, 189(11):1747-1756. **2)** Shu, H.B., H. Johnson, W.H. Hui. *J Leukoc Biol* 1999, 65:680-683. **3)** Marsters, S.A., A. Ashkenazi, et al. 2000, *Curr Biol* 10:785-788.
4) Xia, X., H. Hsu, et al. 2000, *J Exp Med*, 192(1): 137-143. **5)** Thompson J.S., C. Ambrose, et al. Science 2001, 293: 2108-2111. **6)** Roschke, V, T.S. Migone, et al. *J Immunol*. 2002, 169: 4314-4321. **7)** MacLennan, C.M., C.G. Vinuesa, 2002, *Immunity* 17:235-238. **8)** B. Schiemann, et al, (2001) *Science* 293: 2111-2114. **9)** S.M. Harless,et al, (2001) *Curr Biol* 11: 1988-1989. **10)** *Mol Cell Biol* (2001) 21: 4067-4074. **11)** X. Mariette, et al, (2003) *Ann Rhem Dis* 62: 168-171.

STORAGE CONDITIONS: ***Store at 2 - 5^{o}C***. Freeze/Thawing is not recommended.

PRODUCT STABILITY: Product should retain activity for at least 12 months after shipping date when stored as recommended. Ship Date:_____

BUFFER: 50 mM Sodium Phosphate pH 7.5, 100 mM Potassium Chloride, 150mM NaCl, 0.5 mg/ml Gentamicin Sulfate (as a preservative).

PRODUCTION: Antibody was Protein A purified from (low FBS containing) tissue culture supernatant. Purity was >95% Immunoglobulin by SDS-PAGE with less than 1% Bovine Immunoglobulin.

PERFORMANCE: Activity of anti-CD257 antibody was determined by its ability to block binding of recombinant CD257 to receptors present on Raji cell surface. Five x 10^5 human **Raji** cells were washed and incubated 45 minutes on ice with 80 μl of recombinant **CD257(BAFF)trn-muCD8 (cat# 525-020)** at 0.5 μg/ml. Cells were washed twice and incubated with 2^{o} anti-muCD8α/PE Catalog #260-050), after which they were washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of **1.07** $\log_{10}$ fluorescent units when compared to a buffer control. **Binding was 87% inhibited when reagent was pre incubated with 5 μg/ml anti-CD257 antibody.**

****This Product is intended for Laboratory Research use only.***

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