PERFORMANCE DATA SHEET
3019

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

mAb name/Clone: **ANC2H3**
Isotype: Mouse IgG1k
Immunogen: Recombinant CD257(BAFF)

CATALOG#: 266-040
QUANTITY: 120 tests **VOLUME IN VIAL: 0.2ml**
WORKING DILUTION: 1:50 (or use 1.6µl of concentrated reagent per test)

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°C. Freeze/Thawing is not recommended. Protect from light.

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

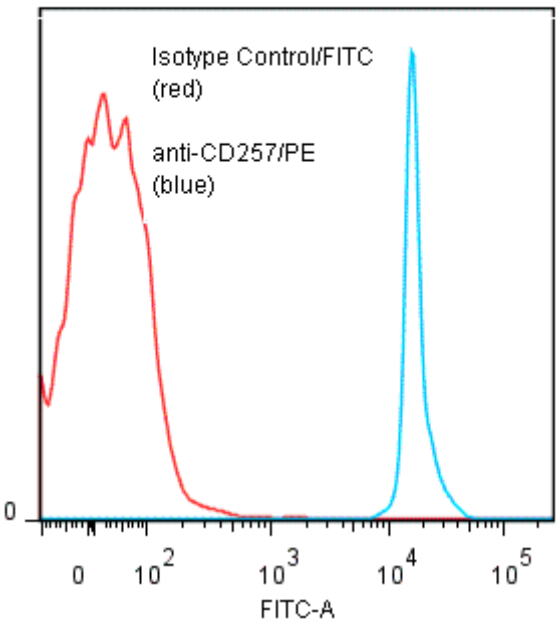
BUFFER: 50 mM Sodium Phosphate pH 7.5, 100 mM Potassium Chloride, 150mM NaCl, 5% Glycerol, 0.2% BSA, 0.04% NaN_3 (as a preservative).

PRODUCTION: Protein A purified antibody from tissue culture supernatant was reacted with FITC. Unconjugated FITC was separated from antibody/FITC conjugate by desalting column. The antibody/FITC conjugate is at approximately **0.25 mg/ml** with a Fluorescein/IgG molar ratio of 5.2.

PERFORMANCE: Five x 10^5 recombinant CD257-muCD8-coated CML Latex beads per tube were washed and incubated 45 minutes on ice with 80 µl of anti-CD257/FITC at a **1:50** dilution (5µg/ml). They were washed three times, fixed and analyzed by FACS . Gate was set on intact, non aggregated beads. These stained positive with a mean shift of **2.89** $\log_{10}$ fluorescent units when compared to a Mouse IgG1/FITC negative control (Catalog #278-040). Binding was blocked when beads were pre incubated with an excess of unlabeled anti-CD257 antibody (Catalog #266-020).

Research use only. Not for use in Diagnostic procedures.

Binding of anti-CD257/FITC to Recombinant CD257-coated beads



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