

For maximal recovery of contents please quick spin vial before opening

## Human CD269(BCMA)-muIg Fusion Protein\*

## CATALOG#: 519-820 (Preservative Free) QUANTITY: 25 ug

## CONCENTRATION: 0.5 mg/ml

Molecular Structure:	A soluble molecule consisting of the extracellular (54aa) domain of human BCMA fused to the
	murine IgG2a Fc (232 aa). Predicted monomeric weight: 33 kd.
Transfectant Cell Line:	СНО

**INFORMATION:** The human B cell activating factor (BAFF) and APRIL(a proliferation inducing ligand) are both type II molecules belonging to the TNF superfamily. They are expressed by non-B cells, and are down regulated by mitogenic stimulation(2). BAFF and APRIL bind to at least two receptors: TACI (transmembrane activator and CAML-interactor) and 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). Recently a third receptor for BAFF (BAFF-R) was 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). Recombinant human BCMA-muIg binds to recombinant BAFF-muCD8 and can inhibit binding of this molecule to receptors on Raji cells.

**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. Open under aseptic conditions.

**PRODUCT STABILITY:** Product should retain activity for at least 6 months after shipping date when stored as recommended. Ship Date:\_\_\_\_\_

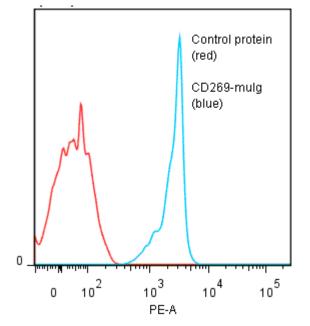
**BUFFER:** 50 mM Sodium Phosphate pH 7.5, 100 mM Potassium Chloride, 150mM NaCl. Product was sterile filtered and vialed under aseptic conditions.

**PRODUCTION:** Human BCMA-muIg fusion protein was purified from (low FBS containing) tissue culture supernatant of CHO transfectants using Protein A and size exclusion chromatography.

**PERFORMANCE:** CD269(BCMA)-muIg bound to BAFFcoated CML beads at **1 ug/ml** in FACS using GAM/FITC detection. Beads stained positive with a **1.17** log shift compared to muIgFc Control Protein (Cat # 581-020).

\*Research use only. Not for use in Diagnostic procedures.

Binding of CD269(BCMA)-mulg +GAM/FITC to BAFF-coated CML



Ancell Corporation P.O. Box 87 Bayport, MN 55003-0087 USA Phone: Toll free 800-374-9523 or 651-439-0835 Fax: 651-439-1940