

PERFORMANCE DATA SHEET
2017

Monoclonal anti-human CD272(BTLA)/Biotin*

mAb name/Clone: ANC6E9

Isotype: Mouse IgG1 κ

Immunogen:

CATALOG#: 272-030

QUANTITY: 100 μ g

CONCENTRATION: 1.0 mg/ml

INFORMATION: Human CD272 (BTLA, B and T Lymphocyte Attenuator) is a member of the Immunoglobulin superfamily and has sequence homology to PD-1 and CTLA4. It is expressed on T and B lymphocytes and other hemopoietic lineages. Engagement of this molecule by its ligand, CD270(HVEM, a TNF superfamily member) can down regulate activated T and B cell responses. CD272 levels on antigen specific CD8+ T cells have been reported to decrease in viral specific, but not melanoma specific activated lines (1). Polymorphism of the CD272 molecule has been linked to rheumatoid arthritis (3).

Antibody from clone ANC6E9 binds to CD272 on the cell surface of human PBMC in Flow cytometry and to recombinant CD272-muIg (cat #542-020) in EIA. This antibody **blocks** binding of Biotinylated CD270(HVEM)-muIg(cat #531-030) to CD272-muIg in EIA. Antibodies ANC6E9 and ANC5A5(cat #372-020) each bind a distinct epitope of CD272 and are suitable as a matched pair for EIA using ANC6E9 as capture and Biotinylated ANC5A5(cat# 372-030) as detector.

References: 1) Derre' L, DE Speiser, et al. (2010) *J Clin Invest* **120**(1):157-167. 2) Otsuki N, Azuma M, et al. (2006) *Biochem Biophys Res Com* **344**(4): 1121-1127. 3) Lin SC, Chan CH, et al. (2006) *J Biomed Sci* **13**(6): 853-860. 4) Pasero C, D Olive, et al. (2009) *Curr Mol Med* **9**(7): 911-927. 5) Gavrieli M, KM Murphy, et al. (2006) *Adv Immunol* **92**: 152-185.

STORAGE CONDITIONS: Store at 2 - 5°C. Freeze/thawing 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, 5% Glycerol, 0.2% BSA, 0.04% NaN₃ (as a preservative).

PRODUCTION: Antibody from (low FBS containing) tissue culture supernatant was Protein A purified to >95% mouse immunoglobulin by SDS-PAGE (<1% bovine immunoglobulin), and reacted with NHS-Biotin. Unconjugated Biotin was removed from conjugate using a desalting column.

PERFORMANCE: ficoll prepared human peripheral blood mononuclear cells (PBMC) per tube were pelleted and pre incubated 5 minutes with 20 μ l of human IgG at 300 μ g/ml after which they were washed and incubated 45 minutes on ice with 80 μ l of anti-CD272/Biotin at 10 μ g/ml. Cells were washed twice and incubated with 2^o reagent Streptavidin/R-PE (Catalog #253-050) after which they were washed three times, fixed and analyzed by FACS. A 68% sub population of the cells stained positive with a mean shift of 1.47 log₁₀ fluorescent units when compared to a Mouse IgG1/Biotin negative control (Catalog #278-030) at a similar concentration. Binding was blocked when cells were pre incubated 10 minutes with 20 μ l of 0.5 mg/ml unlabeled anti-CD272 antibody (Catalog #272-020).

* **Research Use Only. Not for use in Diagnostic procedures.**

Binding of anti-CD272/Biotin (clone ANC6E6) +SA/PE to human PBMC

