

## PERFORMANCE DATA SHEET

1827

# Monoclonal anti-human CD272(BTLA)\*

**mAb name/Clone:** ANC5A5

**Isotype:** Mouse IgG1 $\kappa$

**Immunogen:** Recombinant soluble human CD272

**CATALOG#:** 372-020

**QUANTITY:** 100  $\mu$ 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 ANC5A5 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 **does not** block binding of Biotinylated CD270(HVEM)-muIg(cat #531-030) to CD272-muIg in EIA, but appears to **enhance** this interaction. Antibodies ANC6E9(cat #272-020) 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 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:** Five x 10<sup>5</sup> ficoll prepared human peripheral blood mononuclear cells (PBMC) per tube were pelleted and pre incubated 5 minutes with 20 $\mu$ l of human IgG at 300 $\mu$ g/ml after which they were washed and incubated 45 minutes on ice with 80  $\mu$ l of anti-CD272 antibody(ANC5A5) at 5  $\mu$ g/ml. Cells were washed twice and incubated with 2<sup>o</sup> reagent Goat anti-Mouse IgG/FITC (Catalog #232-011) after which they were washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of 0.76 log<sub>10</sub> fluorescent units when compared to a Mouse IgG1 negative control (Catalog #278-010) at a similar concentration. Binding was blocked when reagent was pre incubated with a 10-fold excess of recombinant CD272-muIg (cat #542-020).

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

**Binding of anti-CD272 mAb (clone ANC5A5)+ GAM/FITC to human PBMC**

