## **Product Data Sheet**

#### PE/Dazzle™ 594 anti-human CD270 (HVEM, TR2)

**Catalog** # / 2194085 / 25 tests

**Size:** 2194090 / 100 tests

**Clone: 122** 

**Isotype:** Mouse IgG1, κ

**Immunogen:** Recombinant human HVEM protein

Reactivity: Human, Non-human primate, Other

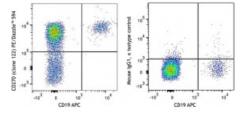
**Formulation:** Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and

0.2% (w/v) BSA (origin USA).

Workshop Number: **HCDM** listed

Concentration: Lot-specific



Human peripheral blood lymphocytes were stained with CD19 (clone HIB19) APC and CD270 (clone 122) PE/Dazzle™ 594 (left) or Mouse IgG1, κ PE/Dazzle™ 594 isotype control (right).

### **Applications:**

**Applications:** Flow Cytometry

Recommended

Usage:

Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5  $\mu$ l per million cells in 100  $\mu$ l staining volume or 5  $\mu$ l per 100  $\mu$ l of whole blood.

volume of 5 pr per 100 pr of whole brood.

\* PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum

emission of 610 nm.

Application

The 122 antibody has been shown to be useful for flow cytometry, Western

Notes: blot, and ELISA.

Application References:

1. Cheung TC, et al. 2010. J. Immunol. 185:1949. PubMed

2. Hobo W, et al. 2012. J Immunol. 189:39. PubMed.

#### **Description:**

The 122 antibody recognizes human HVEM also known as herpesvirus entry mediator A, tumor necrosis factor receptor superfamily, member 14, TNFRSF14, and tumor necrosis factor receptor like 2. HVEM, a member of the TNFR superfamily, is a type I transmembrane protein containing 2 TNF receptor domains with a predicted molecular weight of approximately 30 kD. HVEM is widely expressed in blood vessels, brain, heart, kidney, liver, lung, prostate, spleen, thymus and other organs. Resting T cells and naïve and memory B cells express high levels of HVEM as well. In humans, HVEM is not expressed in germinal center B cells. Immature dendritic cells express high levels of HVEM that is downregulated upon maturation. HVEM plays an important role in herpes simplex virus pathogenesis by enhancing entry into cells. Signaling through HVEM activates JNK1, NF-kB and AP-1 to control gene expression in response to infection or cellular stress and activate the immune response. HVEM binds to LIGHT and has also been shown to associate with several other proteins including TRAF1, TRAF2, TRAF3, TRAF5, B and T lymphocyte associated protein (BTLA), and estrogen receptor alpha.

# Antigen References:

- 1. Carfi A, et al. 2001. Molec. Cell 8:169.
- 2. Gonzalez LC, et al. 2005. Proc. Nat. Acad. Sci. 102:1116.
- 3. Kwon BS, et al. 1997. J. Biol. Chem. 272:13471.
- 4. Marsters SA, et al. 1997. J. Biol. Chem. 272:14272.
- 5. Montgomery RI, et al. 1996. Cell 87:427.