SONY

# Product Data Sheet

## PE anti-human CD270 (HVEM, TR2)

**Catalog # / Size:** 2194030 / 100 tests
2194025 / 25 tests

**Clone:** 122

**Isotype:** Mouse IgG1, κ

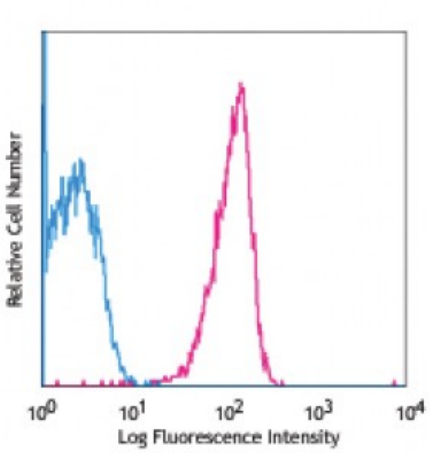
**Immunogen:** Recombinant human HVEM protein

**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with PE under optimal conditions. The solution is free of unconjugated PE and unconjugated antibody.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

**Concentration:** Lot-specific




Human peripheral blood lymphocytes stained with 122 PE

## Applications:

**Applications:** Flow Cytometry

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20 microL to 5 microL per test**. Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 microL staining volume or per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** The 122 antibody has been shown to be useful for flow cytometry, Western 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-κB 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 α.

**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.*