## **Product Data Sheet**

## PE/Fire™ 810 anti-human CD39

Catalog # / 2241225 / 25 tests

Size:

Clone: A1

**Isotype:** Mouse IgG1, κ

Immunogen: PHA activated human lymphocytes

Reactivity: Human, Other

**Preparation:** The antibody was purified by affinity

chromatography and conjugated with

PE/Fire™ 810 under optimal

conditions.

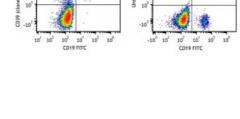
**Formulation:** Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and

BSA (origin USA)

Workshop Number: **HCDM** listed

**Concentration:** Lot-specific



Human peripheral blood lymphocytes were stained with anti-human CD19 FITC and anti-human CD39 (clone A1) PE/Fire™ 810 (left) or stained with anti-human CD19 FITC only (right).

## **Applications:**

**Applications:** Flow Cytometry

Application

Notes:

The A1 antibody binds to the human CD39 cell surface antigen and has been shown to block MHC independent target cell recognition by hapten-specific CTL. Additional reported applications (for the relevant formats) include:  $in\ vitro\ CD39\ blockade^3$ , immunofluorescence<sup>4</sup>, and immunohistochemistry<sup>6</sup>.

Application References:

- 1. Aversa GG, et al. 1988. Transplant. P. 20:4952.
- 2. Aversa GG, et al. 1989. Transplant. P. 21:34950.
- 3. Borsellino G, et al. 2007. Blood. 110:1225. (Block)
- 4. Stockl J, et al. 2001. J. Immunol. 167:2724. (IF)
- 5. Sestak K, et al. 2007. Vet. Immunol. Immunopathol. 119:21.
- 6. Lyck L, et al. 2008. J. Histochem. Cytochem. 56:201. (IHC)

**Description:** 

Human CD39 is an integral membrane protein with two transmembrane domains. It exists as a homotetramer. Expression of CD39 is found on activated lymphocytes, a subset of T cells and B cells, and dendritic cells with weak staining on monocytes and granulocytes. CD39 and CD73 have been found on regulatory T cells, specifically the effector/memory like T cells. CD39 can hydrolyze both nucleoside triphosphates and diphosphates. CD39 is the dominant ecto nucleotidase of vascular and placental

trophoblastic tissues and appears to modulate the functional expression of type 2 purinergic (P2) G protein coupled receptors (GPCRs). CD39 has intrinsic ecto-ATPase activity. Expression of CD39 is induced on T cells and

increased on B cells as a late activation antigen.