

# Product Data Sheet

## Purified anti-human CD39

**Catalog # / Size:** 328202 / 100 µg

**Clone:** A1

**Isotype:** Mouse IgG1, κ

**Immunogen:** PHA activated human lymphocytes

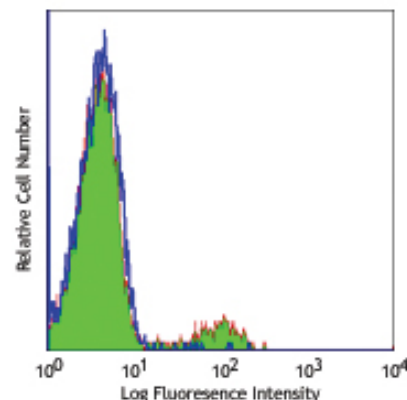
**Reactivity:** Human, **Cross-Reactivity:** Rhesus

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

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

**Concentration:** 0.5 mg/ml

**Storage:** The antibody solution should be stored undiluted at 4°C.



Human peripheral blood lymphocytes stained with purified A1, followed by anti-mouse IgG FITC

## Applications:

**Applications:** FC - *Quality tested*  
IHC, IP - *Reported in the literature*

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is  $\leq 1.0$  µg per  $10^6$  cells in 100 µl volume or 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

**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.

**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* 2007 110:1225.
4. Stockl J, *et al.* 2001. *J. Immunol.* 167:2724.
5. Sestak K, *et al.* 2007. *Vet. Immunol. Immunopathol.* 119:21.

**Description:** Human CD39 is an integral membrane protein with two transmembrane domains and 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. Recently, 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.

**Related Products:**

<b>Product</b>	<b>Clone</b>	<b>Application</b>
Purified Mouse IgG1, κ Isotype Ctrl	MOPC-21	FC, ICFC, ICC, IF, IHC, IP, WB
Cell Staining Buffer		FC, ICC, ICFC
RBC Lysis Buffer (10X)		FC, ICFC
Human TruStain FcX™ (Fc Receptor Blocking Solution)		FC, ICC, ICFC



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