

# PE/Dazzle™ 594 anti-mouse CD39

**Catalog # /** 1319060 / 100 µg  
**Size:** 1319055 / 25 µg

**Clone:** Duha59

**Isotype:** Rat IgG2a, κ

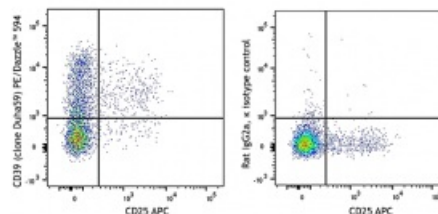
**Immunogen:** CD39 cDNA expression vector

**Reactivity:** Mouse

**Preparation:** The antibody was purified by affinity chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions. The solution is free of unconjugated PE/Dazzle™ 594 and unconjugated antibody.

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

**Concentration:** 0.2 mg/ml



C57BL/6 Mouse splenocytes were stained with CD4 FITC, CD25 PE, and CD39 (clone Duha59) PE/Dazzle™ 594 (left) or Rat IgG2a, κ PE/Dazzle™ 594 isotype control (right). Data shown are from CD4<sup>+</sup> gated population.

## 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 ≤1.0 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

\* PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm.

**Application References:**

1. Borsellino G, *et al.* 2007. *Blood* 110:1225.
2. Deaglio S, *et al.* 2007. *J. Exp. Med.* 204:1257.
3. Bynoe MS, *et al.* 2008. *Trends Immunol.* 29:99.
4. Ndhlovu LC, *et al.* 2010

**Description:** CD39, nucleoside triphosphate diphosphohydrolase-1 (NTPDase 1), is an ectoenzyme that degrades ATP to AMP. It is a member of the ectonucleoside triphosphate dihydrolases (E-NTPDases), which are involved in regulation of extracellular nucleotide catabolism and controlling the extracellular nucleoside triphosphate pool (NTP). CD39 is the dominant member of this family in the immune system, and is involved in suppression of inflammation and control of platelet activation. CD39 is expressed on B cells, dendritic cells, and a subset of T cells, including regulatory T cells and memory T cells. The coordinated expression of CD39/CD73 on Tregs and the adenosine A2A receptor on activated T effector cells generates immunosuppressive loops.

**Antigen References:**

1. Borsellino G, *et al.* 2007. *Blood* 110:1225.
2. Deaglio S, *et al.* 2007. *J. Exp. Med.* 204:1257.
3. Bynoe MS, *et al.* 2008. *Trends Immunol.* 29:99.
4. Ndhlovu LC, *et al.* 2010. *Eur. J. Immunol.* 40:134.

