

Alexa Fluor® 647 anti-mouse CD39

Catalog # / Size: 1319035 / 25 µg
1319040 / 100 µg

Clone: Duha59

Isotype: Rat IgG2a, κ

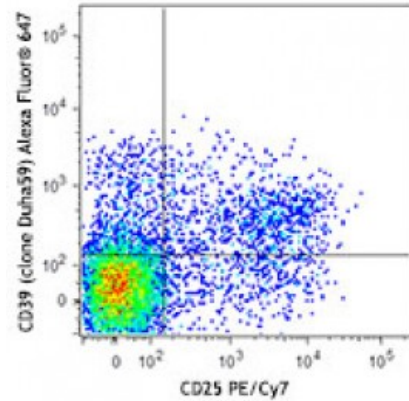
Immunogen: CD39 cDNA expression vector

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 647 under optimal conditions.

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

Concentration: 0.2



C57BL/6 splenocytes were stained with CD4 FITC, CD25 PE/Cy7, and CD39 (clone Duha59) Alexa Fluor® 647 (top) or rat IgG2a, κ Alexa Fluor® 647 isotype control (bottom). The data was analyzed by gating on CD4+ cells.

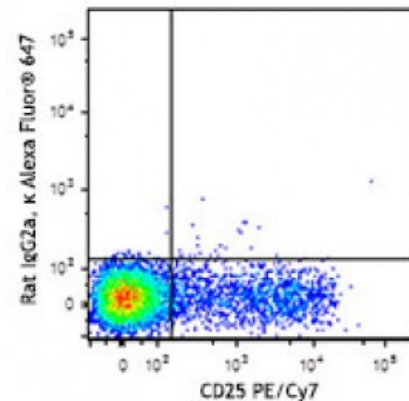
Applications:

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 ≤2.0 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633 nm / 635 nm.

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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