

PE/Fire™ 744 anti-mouse CD39 Antibody

Catalog# / Size	143827 / 25 µg 143828 / 100 µg
Clone	Duha59
Regulatory Status	RUO
Other Names	Entpd1, NTPDase1
Isotype	Rat IgG2a, κ
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.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	CD39 cDNA expression vector
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide
Preparation	The antibody was purified by affinity chromatography and conjugated with PE/Fire™ 744 under optimal conditions.
Concentration	0.2 mg/mL
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
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 ≤ 0.5 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application. True-Stain Monocyte Blocker™ (Cat No. 426102) is recommended to minimize non-specific staining of PE/Fire™ 744 on monocytes and macrophages. * PE/Fire™ 744 has a maximum excitation of 565 nm and a maximum emission of 744 nm.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)

Antigen Details

Structure	A member of ectonucleoside triphosphate dihydrolases (E-NTPDases), an ectoenzyme that
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degrades ATP to AMP

Distribution	B cells, dendritic cells, and a subset of T cells
Function	Involved in suppression of inflammation and control of platelet activation; coordinated expression of CD39/CD73 on Tregs and the adenosine A2A receptor on activated T effector cells generates immunosuppressive loops
Interaction	Proteolysis of amyloid precursor protein (APP)
Cell Type	B cells, Dendritic cells, T cells, Tregs
Biology Area	Immunology
Molecular Family	CD Molecules
Antigen References	1. Borsellino G, <i>et al.</i> 2007. <i>Blood</i> 110:1225. 2. Deaglio S, <i>et al.</i> 2007. <i>J. Exp. Med.</i> 204:1257. 3. Bynoe MS, <i>et al.</i> 2008. <i>Trends Immunol.</i> 29:99. 4. Ndhlovu LC, <i>et al.</i> 2010. <i>Eur. J. Immunol.</i> 40:134.
Gene ID	12495

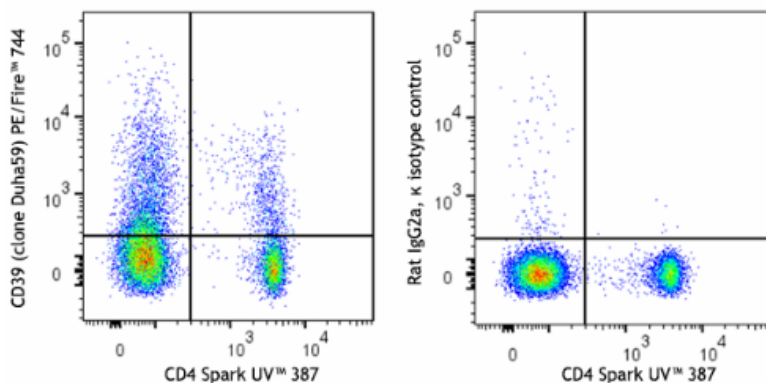
Related Protocols

- [Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

PE/Fire™ 700 anti-mouse CD39, PerCP/Fire™ 806 anti-mouse CD39, PE/Cyanine5 anti-mouse CD39, PE/Fire™ 640 anti-mouse CD39, Purified anti-mouse CD39, PE anti-mouse CD39, PE/Cyanine7 anti-mouse CD39, PE/Fire™ 744 anti-mouse CD39, PE/Dazzle™ 594 anti-mouse CD39, APC anti-mouse CD39, TotalSeq™-A0834 anti-mouse CD39, TotalSeq™-C0834 anti-mouse CD39, Alexa Fluor® 647 anti-mouse CD39, PerCP/Fire™ 780 anti-mouse CD39

Product Data



C57BL/6 mouse splenocytes were stained with anti-mouse CD4 (clone GK1.5) Spark UV™ 387 and anti-mouse CD39 (clone Duha59) PE/Fire™ 744 (left) or rat IgG2a, κ PE/Fire™ 744 isotype control (right).

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