

CD39 Monoclonal Antibody (eBioA1 (A1)), NovaFluor™ Blue 660-120S, eBioscience™

Product Details	
Size	100 Tests
Host/Isotype	Mouse / IgG1, kappa
Class	Monoclonal
Type	Antibody
Clone	eBioA1 (A1)
Conjugate	NovaFluor™ Blue 660-120S
Excitation/Emission Max	492/665 nm
Form	Liquid
Concentration	5 µL/Test
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2910783

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.8 µg)/test	-

Product Specific Information

Description: The eBioA1 monoclonal antibody reacts with human CD39 also known as ectonucleoside triphosphate diphosphohydrolase 1 (ENTPD1) or NTPDase. CD39 is an integral membrane protein with two transmembrane domains and exists as a homotetramer. It is the most prominent ectoenzyme of the immune system. The function of CD39 is to effectively remove toxic extracellular ATP by converting it to ADP or AMP. CD39 is thought to work together with CD73 to hydrolyze ATP and has been well characterized on Langerhans cells. Expression of CD39 was originally identified on activated lymphocytes. Expression is also found on a subset of T cells, B cells and dendritic cells as well as weak staining on monocytes and granulocytes. Recently, CD39 and CD73 have been found on regulatory T cells (Treg). Expression of CD39 on Treg may facilitate their entry into inflamed areas where high levels of ATP are present. Expression of CD39 on Foxp3+CD4+ cells ranges from 25-45%.

Applications Reported: This eBioA1 (A1) antibody has been reported for use in flow cytometric analysis.

Applications Tested: This eBioA1 (A1) antibody has been pre-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 5 µL (0.8 µg) per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells /test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

NovaFluor dyes are not compatible with DNA intercalating viability dyes. Do not use viability dyes such as propidium iodide, 7-actinomycin D (7-AAD) and DAPI. Invitrogen LIVE/DEAD Fixable Dead Cell stains are recommended for use with NovaFluor dyes.

Each NovaFluor conjugate or kit is shipped with CellBlox Blocking Buffer. Use this buffer whenever staining with NovaFluor conjugates, including single-color compensation controls using cells. Whenever possible, we recommend adding CellBlox Blocking Buffer to antibody cocktails/master mixes prior to combining with cells. Add 5 µL per sample (regardless of the number of NovaFluors in your panel) to use the antibody cocktail as intended. For single-color controls, use 5 µL of CellBlox Blocking Buffer per 100µL of cell sample containing 10³ to 10⁸ cells.

Excitation: 509 nm; Emission: 665 nm; Laser: 488 nm (Blue) Laser

NovaFluor conjugates are based on Phiton™ technology utilizing novel nucleic acid dye structures that allow for engineered fluorescent signatures with consideration for spillover and spread impacts. Learn more

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