

Purified anti-human CD73 (Ecto-5'-nucleotidase) Antibody

Catalog# / Size	344002 / 100 µg
Clone	AD2
Regulatory Status	RUO
Workshop	V B-CD73.3
Other Names	Ecto-5'-nucleotidase, E.C3.1.3.5, L-VAP-2, NT5E, 5'-NT
Isotype	Mouse IgG1, κ
Description	CD73 is a 70 kD glycoposphatidylinositol (GPI)-linked 5'-nucleotidase, which is also known as ecto-5'-nucleotidase. It converts adenosine monophosphate (AMP) to adenosine. CD73 is expressed on subsets of T and B cells, mesenchymal stem cells, follicular dendritic cells, endothelial cells, and epithelial cells. It has been reported that CD73 costimulates T cell activation, and mediates adhesion of lymphocytes to follicular dendritic cells and endothelial cells.

Product Details

Verified Reactivity	Human
Reported Reactivity	African Green, Baboon
Antibody Type	Monoclonal
Host Species	Mouse
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C.
Application	FC - Quality tested IHC-F - Verified Block - Reported in the literature, not verified in house
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 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application. For immunohistochemical staining on frozen tissue sections, the suggested use of this reagent is 5.0 - 10 µg per ml. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes	Additional reported applications (for the relevant formats) include: immunofluorescence ³ . Clone AD2 has been noted to induce clustering and internalization of CD73 <i>in vivo</i> and inhibit metastasis in a murine breast cancer xenograft model ⁴ .
Application References	1. Nakamura T, <i>et al.</i> 1993. <i>J. Immunol.</i> 151:6933. 2. Liao J, <i>et al.</i> 2011. <i>J Endod.</i> 37:1217. PubMed 3. Touboul C, <i>et al.</i> 2013. <i>J. Transl. Med.</i> 11:28. (IF) 4. Terp MG, <i>et al.</i> 2013. <i>J Immunol.</i> 191: 4165-73 (Block)
Product Citations	1. Slamecka J, <i>et al.</i> 2017. <i>Cell Cycle.</i> 17:330. PubMed 2. Liao J, <i>et al.</i> 2011. <i>J Endod.</i> 37:1217. PubMed 3. Heesters BA, <i>et al.</i> 2021. <i>J Exp Med.</i> 218:. PubMed 4. Le X, <i>et al.</i> 2021. <i>J Thorac Oncol.</i> 16:583. PubMed 5. Garita-Hernández M, <i>et al.</i> 2021. <i>Front Cell Neurosci.</i> 15:648210. PubMed 6. Xue G, <i>et al.</i> 2021. <i>Nat Biomed Eng.</i> 5:1306. PubMed

(PubMed link indicates BioLegend citation)

7. Bengsch B *et al.* 2018. *Immunity*. 48(5):1029-1045 . [PubMed](#)
8. Messaoudi N, *et al.* 2020. *Oncoimmunology*. 9:1746138. [PubMed](#)
9. Chevrier S, *et al.* 2021. *Cell Reports Medicine*. 2(1):100166. [PubMed](#)
10. Lavin Y *et al.* 2017. *Cell*. 169(4):750-765 . [PubMed](#)

RRID AB_2154067 (BioLegend Cat. No. 344002)

Antigen Details

Structure	GPI-linked 5'-nucleotidase, 70 kD
Distribution	Subsets of T cells and B cells, mesenchymal stem cells, follicular dendritic cells, endothelial cells, and epithelial cells
Function	Catalyses dephosphorylation of adenosine monophosphate, costimulates T cell activation, mediates adhesion of lymphocytes to follicular dendritic cells and endothelial cells
Cell Type	B cells, Dendritic cells, Endothelial cells, Epithelial cells, Mesenchymal Stem Cells, T cells, Tregs
Biology Area	Costimulatory Molecules, Immunology, Stem Cells
Molecular Family	Adhesion Molecules, CD Molecules
Antigen References	<ol style="list-style-type: none"> 1. Zola H, <i>et al.</i> 2007. <i>Leukocyte and stromal Cell Molecules:the CD Markers</i>. A John Wiley & Sons Inc, Publication. 2. Airas L and Jalkanen S, <i>et al.</i> 1996. <i>Blood</i> 88:1755. 3. Gutensohn W, <i>et al.</i> 1995. <i>Cell Immunol</i>. 161:213. 4. Airas L, <i>et al.</i> 1995. <i>J. Exp. Med.</i> 182:1603.
Gene ID	4907

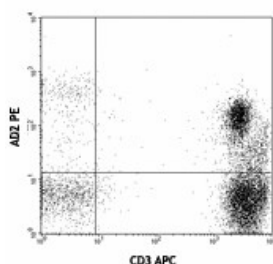
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

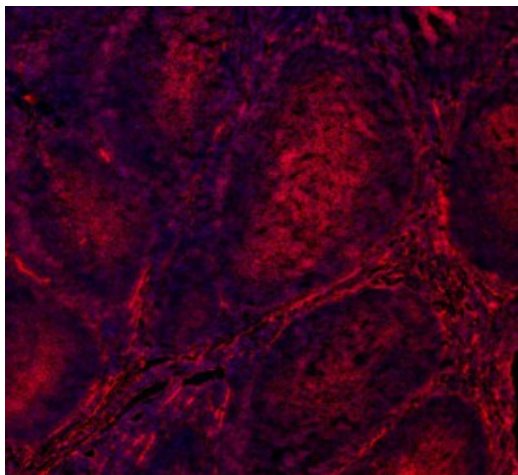
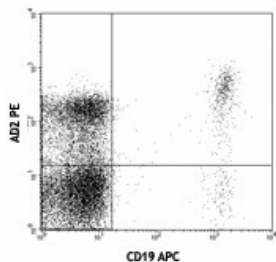
FITC anti-human CD73 (Ecto-5'-nucleotidase), Brilliant Violet 421™ anti-human CD73 (Ecto-5'-nucleotidase), Purified anti-human CD73 (Ecto-5'-nucleotidase), PE anti-human CD73 (Ecto-5'-nucleotidase), APC anti-human CD73 (Ecto-5'-nucleotidase), PE/Cyanine7 anti-human CD73 (Ecto-5'-nucleotidase), Pacific Blue™ anti-human CD73 (Ecto-5'-nucleotidase), PerCP/Cyanine5.5 anti-human CD73 (Ecto-5'-nucleotidase), Biotin anti-human CD73 (Ecto-5'-nucleotidase), PE/Dazzle™ 594 anti-human CD73 (Ecto-5'-nucleotidase), APC/Cyanine7 anti-human CD73 (Ecto-5'-nucleotidase), Brilliant Violet 605™ anti-human CD73 (Ecto-5'-nucleotidase), Brilliant Violet 711™ anti-human CD73 (Ecto-5'-nucleotidase), Brilliant Violet 785™ anti-human CD73 (Ecto-5'-nucleotidase), TotalSeq™-A0577 anti-human CD73 (Ecto-5'-nucleotidase), TotalSeq™-C0577 anti-human CD73 (Ecto-5'-nucleotidase), TotalSeq™-B0577 anti-human CD73 (Ecto-5'-nucleotidase), APC/Fire™ 750 anti-human CD73 (Ecto-5'-nucleotidase), TotalSeq™-D0577 anti-human CD73 (Ecto-5'-nucleotidase), Alexa Fluor® 700 anti-human CD73 (Ecto-5'-nucleotidase), Alexa Fluor® 647 anti-human CD73 (Ecto-5'-nucleotidase)

Product Data



Human peripheral blood lymphocytes stained with AD2 PE and CD3 APC

Human peripheral blood lymphocytes stained with AD2 PE and CD19 APC



Frozen human tonsil section was fixed with 4% paraformaldehyde (PFA) for ten minutes at room temperature and blocked with 5% FBS for 30 minutes at room temperature. Then the section was stained with 10 µg/ml of purified anti-human CD73 (clone AD2) overnight at 4°C, followed by 2.5 µg/ml of Alexa Fluor® 594 anti-mouse IgG (clone Poly4053) (red) for two hours at room temperature. Nuclei were counterstained with DAPI (blue). The image was captured by 10X objective.

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