Anti-Human CD73 Antibody, Clone AD2, APC

Antibodies

Mouse monoclonal IgG1 antibody against human, rhesus, chimpanzee CD73, APC-conjugated

Catalog #60044AZ	100 Tests	5 µL/test
#60044AZ.1	25 Tests	5 µL/test

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Product Description

The AD2 antibody reacts with human CD73, a glycosyl phosphatidylinositol (GPI)-anchored glycoprotein and ecto-5'-nucleotidase expressed on the surface of subsets of B and T cells, follicular dendritic cells, mesenchymal stem cells, endothelial cells, and epithelial cells. CD73 comprises a homodimer of ~70 kDa subunits that contact each other through their C-terminal domains. The enzyme catalyzes the hydrolysis of 5'-adenosine monophosphate (AMP) to form the bioactive nucleoside adenosine, and plays a pivotal role in the activation of P1 adenosine receptors by regulating extracellular adenosine concentrations. CD73 also appears to function as a co-signaling molecule on T cells and as an adhesion molecule mediating lymphocyte interactions with the endothelium and follicular dendritic cells. CD73 is used as a marker for lymphocyte differentiation, its expression increasing during development. It is also a useful marker for identifying undifferentiated mesenchymal stem cells. CD73 is highly expressed in many types of human and mouse cancers, and has been implicated in the control of tumor growth. Genetic defects in CD73 have been linked to several immunodeficiency diseases.

Target Antigen Name:	CD73
Alternative Names:	5'-nucleotidase, ecto (CD73), Ecto-5'-nucleotidase, L-VAP-2, NT5E
Gene ID:	4907
Species Reactivity:	Human, Rhesus, Chimpanzee, Pigtailed macaque
Host Species:	Mouse (BALB/c)
Clonality:	Monoclonal
Clone:	AD2
Isotype:	IgG1, kappa
Immunogen:	Human pre-B leukemia cell line 207
Conjugate:	APC

Applications

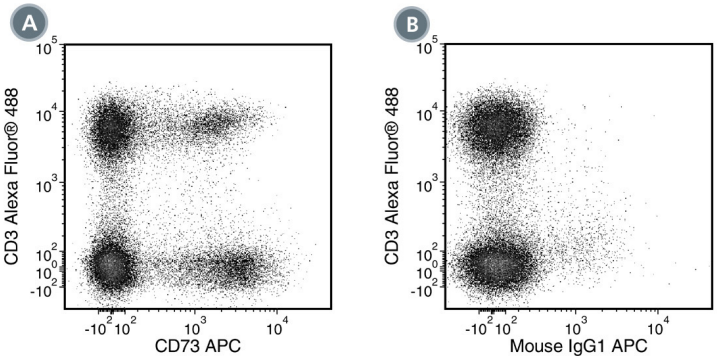
Verified:	FC
Reported:	FC, IF, IHC
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Human T Cell Enrichment Kit (Catalog #19051) and EasySep™ Human B Cell Enrichment Kit (Catalog #19054), and for labeling human mesenchymal cells grown in MesenCult™-XF Medium (Catalog #05420) and MesenCult™-ACF Medium (Catalog #05440).

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence-activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

Properties

Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) bovine serum albumin
Purification:	The antibody was purified by affinity chromatography and conjugated with APC under optimal conditions. The solution is free of unconjugated APC and unconjugated antibody.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to light. For product expiry date, please contact techsupport@stemcell.com.
Directions for Use:	For flow cytometry the suggested use of this antibody is ≤ 5 µL per 1 x 10^6 cells in 100 µL. It is recommended that the antibody be titrated for optimal performance for each application.

Data



(A) Flow cytometry analysis of human peripheral blood mononuclear cells (PBMCs; gated on lymphocytes) labeled with Anti-Human CD73 Antibody, Clone AD2, APC and Anti-Human CD3 Antibody, Clone UCHT1, Alexa Fluor® 488 (Catalog #60011AD).
(B) Flow cytometry analysis of human PBMCs (gated on lymphocytes) labeled with a mouse IgG1, kappa isotype control antibody, APC and Anti-Human CD3 Antibody, Clone UCHT1, Alexa Fluor® 488.

Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, please visit our website at www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

References

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