# Anti-Human CD73 Antibody, Clone AD2, FITC

## Antibodies

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

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| Catalog | #60044FI | 100 tests | 5 µL/test |
| | #60044FI.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.

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| 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: | FITC |

## Applications

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| Verified: | FC |
| Reported: | FC, IF |
| 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; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

## Properties

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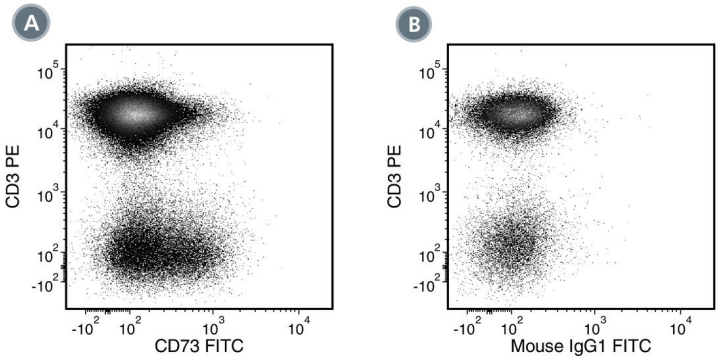
| Formulation: | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) bovine serum albumin |
| Purification: | The antibody was purified by affinity chromatography and conjugated with FITC under optimal conditions. The solution is free of unconjugated FITC and unconjugated 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 volume. 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, FITC and Anti-Human CD3 Antibody, Clone UCHT1, PE (Catalog #60011PE).
(B) Flow cytometry analysis of human PBMCs (gated on lymphocytes) labeled with a mouse IgG1, kappa isotype control antibody, FITC and Anti-Human CD3 Antibody, Clone UCHT1, PE.

## 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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13. Salazar-Gonzalez JF et al. (1985) Reduced ecto-5'-nucleotidase activity and enhanced OKT10 and HLA-DR expression on CD8 (T suppressor/cytotoxic) lymphocytes in the acquired immune deficiency syndrome: evidence of CD8 cell immaturity. J Immunol 135(3): 1778-85. (FA)