

1P-675-T025

## **Monoclonal Antibody to CD73** Phycoerythrin (PE) conjugated (25 tests)

Clone: AD2

Isotype: Mouse IqG1

Specificity: The mouse monoclonal antibody AD2 recognizes CD73, a 70 kDa GPI-anchored

5'-nucleotidase expressed predominantly on T and B cell subsets, follicular

dendritic cells and endothelial cells.

**Regulatory Status: RUO** 

**Species Reactivity:** Human

**Preparation:** The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum

conditions. The conjugate is purified by size-exclusion chromatography and

adjusted for direct use. No reconstitution is necessary.

**Storage Buffer:** The reagent is provided in stabilizing phosphate buffered saline (PBS) solution

containing 15mM sodium azide.

Storage / Stability: Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not

use after expiration date stamped on vial label.

The reagent is designed for Flow Cytometry analysis of human blood cells using 10  $\mu$ l reagent / 100  $\mu$ l of whole blood or 10<sup>6</sup> cells in a suspension. Usage:

The content of a vial (0.25 ml) is sufficient for 25 tests.

**Expiration:** See vial label

Lot Number: See vial label

**Background:** CD73 (ecto-5'-nucleotidase) is a 70 kDa glycoprotein anchored to the extracellular

leaflet of the plasma membrane by GPI. This ecto-enzyme catalyzes dephosphorylation of AMP to adenosine. CD73 is expressed in various types of cells, such as epithelial, muscle, and endothelial cells, neutrophils, lymphocytes and fibroblasts. Inflammatory mediators support CD73 expression and its enzymatic activity, leading to the release of adenosine, which modulates inflammation through adenosine receptors. CD73 is expressed in a variety of lymphomas and leukemias, including ALL and CLL, whereas immunodeficient

patients usually express low levels of this protein.



## PRODUCT DATA SHEET

## References:

\*Borrione P, Peola S, Mariani S, Besostri B, Mallone R, Malavasi F, Pileri A, Massaia M: CD38 stimulation lowers the activation threshold and enhances the alloreactivity of cord blood T cells by activating the phosphatidylinositol 3-kinase pathway and inducing CD73 expression. J Immunol. 1999 May 15;162(10):6238-46.

\*Rodriguez MW, Paquet AC, Yang YH, Erle DJ: Differential gene expression by integrin beta 7+ and beta 7- memory T helper cells. BMC Immunol. 2004 Jul 5;5:13.

\*Kögler G, Sensken S, Airey JA, Trapp T, Müschen M, Feldhahn N, Liedtke S, Sorg RV, Fischer J, Rosenbaum C, Greschat S, Knipper A, Bender J, Degistirici O, Gao J, Caplan AI, Colletti EJ, Almeida-Porada G, Müller HW, Zanjani E, Wernet P: A new human somatic stem cell from placental cord blood with intrinsic pluripotent differentiation potential. J Exp Med. 2004 Jul 19;200(2):123-35.

\*Mokry J, Soukup T, Micuda S, Karbanova J, Visek B, Brcakova E, Suchanek J, Bouchal J, Vokurkova D, Ivancakova R: Telomere attrition occurs during ex vivo expansion of human dental pulp stem cells. J Biomed Biotechnol. 2010;2010:673513.

\*Nemoto E, Tada H, Shimauchi H: Disruption of CD40/CD40 ligand interaction with cleavage of CD40 on human gingival fibroblasts by human leukocyte elastase resulting in down-regulation of chemokine production. J Leukoc Biol. 2002 Sep;72(3):538-45.

\*Semenov OV, Koestenbauer S, Riegel M, Zech N, Zimmermann R, Zisch AH, Malek A: Multipotent mesenchymal stem cells from human placenta: critical parameters for isolation and maintenance of stemness after isolation. Am J Obstet Gynecol. 2010 Feb;202(2):193

\*Hashikawa T, Takedachi M, Terakura M, Saho T, Yamada S, Thompson LF, Shimabukuro Y, Murakami S: Involvement of CD73 (ecto-5'-nucleotidase) in adenosine generation by human gingival fibroblasts. J Dent Res. 2003 Nov:82(11):888-92.

\*Paquet-Fifield S, Schlüter H, Li A, Aitken T, Gangatirkar P, Blashki D, Koelmeyer R, Pouliot N, Palatsides M, Ellis S, Brouard N, Zannettino A, Saunders N, Thompson N, Li J, Kaur P: A role for pericytes as microenvironmental regulators of human skin tissue regeneration. J Clin Invest. 2009 Sep;119(9):2795-806. \*And many other.

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