

PE anti-human CD74

Catalog # / Size: 2234040 / 100 tests
2234035 / 25 tests

Clone: LN2

Isotype: Mouse IgG1, κ

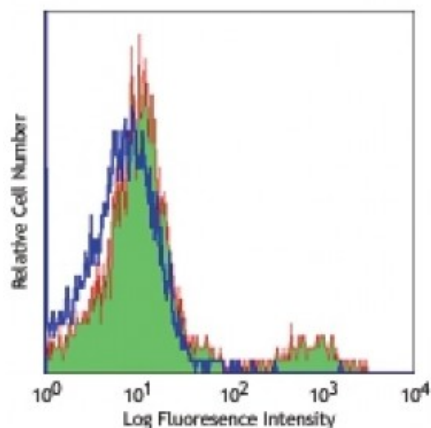
Immunogen: SU-DHL-4 cells

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography, and conjugated with PE under optimal conditions. The solution is free of unconjugated PE and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

Concentration: Lot-specific



Human peripheral blood lymphocytes stained with LN2 PE

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20 microL to 5 microL per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 microL staining volume or per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: Clone LN2 is reactive with an epitope residing within 60 amino acids of the extracytoplasmic, COOH terminus of the protein.³

Additional reported applications (for the relevant formats) include: immunohistochemical staining^{1,2} of frozen sections and formalin-fixed paraffin-embedded sections^{1,2}, immunoprecipitation¹, and immunofluorescence⁴.

Application References:

1. Epstein AL, *et al.* 1984. *J. Immunol.* 133:1028. (IHC, IP)
2. Marder RJ, *et al.* 1985. *Lab. Invest.* 52:497. (IHC)
3. Wraight CJ, *et al.* 1990. *J. Biol. Chem.* 265:5787.
4. Leng L, *et al.* 2003. *J. Exp. Med.* 197:1467. (IF)

Description: CD74 is a type II transmembrane glycoprotein also known as MHC class II associated invariant chain, invariant chain, Ii, MHC class II chaperone, and MIF receptor. CD74 exists in four isoforms with molecular masses of 33, 35, 41, and 43 kD, depending on genetic splicing. CD74 is primarily expressed on antigen presenting cells, including B cells, monocytes/macrophages, dendritic cells, and Langerhans cells. It is also expressed by activated T cells and activated endothelial and epithelial cells as well as carcinomas of lung, renal, gastric and thymic origin. The primary function of CD74 is intracellular sorting of MHC class II molecules and regulation of exogenous peptide loading onto MHC class II. It is also involved in the modulation of B cell differentiation and positive selection of CD4⁺ T cells. It has been reported that CD74 binds MIF (macrophage migration inhibitory factor) and signals through CD44 to regulate innate and adaptive immunity. It is also reported that *H. pylori* infection occurs through urease B

binding of CD74 on gastric epithelial cells, inducing gastric epithelial cell apoptosis, NF- κ B activation, and IL-8 production.

Antigen
References:

1. Moldenhauer G, *et al.* 1999. *Immunology* 96:473.
2. Shi X, *et al.* 2006. *Immunity* 25:595.
3. Beswick EJ, *et al.* 2006. *Infect. Immun.* 74:1148.
4. Zola H, *et al.* 2007. Leukocyte