

### 30-2853: Anti-Human CD74 PE MAb (Clone: LN2)

|                                |                             |
|--------------------------------|-----------------------------|
| <b>Clonality :</b>             | Monoclonal                  |
| <b>Clone Name :</b>            | LN2                         |
| <b>Application :</b>           | FACS                        |
| <b>Reactivity :</b>            | Human                       |
| <b>Conjugate :</b>             | PE                          |
| <b>Gene :</b>                  | CD74                        |
| <b>Gene ID :</b>               | 972                         |
| <b>Uniprot ID :</b>            | P04233                      |
| <b>Alternative Name :</b>      | p33, DHLAG, HLADG, Ia-gamma |
| <b>Isotype :</b>               | Mouse IgG1                  |
| <b>Immunogen Information :</b> | SU-DHL-4 lymphoma cells     |

#### Description

Specificity: The antibody LN2 recognizes an extracellular epitope of CD74 (the MHC II-associated invariant chain, Ii), a type II transmembrane protein expressed in antigen-presenting cells, as well as e.g. on activated neoplastic cells in T cell lymphomas, in lymph node germinal center, mantle zone B cells, histiocytes, interdigitating reticulum cells, Langerhans cells, thymic dendritic cells and peripheral blood B lymphocytes.

CD74 (the MHC II-associated invariant chain, Ii) is a type II transmembrane protein expressed in antigen-presenting cells, that serves as MHC II chaperone which promotes MHC II trafficking from the ER to endocytic compartments, prevents peptide binding in the ER and contributes to peptide editing in the MHC II compartment; it is also an accessory signaling molecule implicated e.g. in malignant B cell proliferation. Stimulation of cell surface CD74 leads to NFkappaB activation, which enables entry of the stimulated cell into the S phase. CD74 binds pro-inflammatory cytokine MIF with high affinity and interacts with CD44. Binding of Vpu, an HIV1 protein, to CD74 modulates MHC II presentation.

#### Product Info

|                            |   |
|----------------------------|---|
| <b>Amount :</b>            | 100 tests   |
| <b>Purification :</b>      | Purified antibody is conjugated with R-phycoerythrin (PE) under optimum conditions. Unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography. |
| <b>Content :</b>           | Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide   |
| <b>Storage condition :</b> | Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.  |

#### Application Note

Flow cytometry: The reagent is designed for analysis of human blood cells using 20 µl reagent / 100 µl of whole blood or 10<sup>6</sup> cells in a suspension. The content of a vial (2 ml) is sufficient for 100 tests.

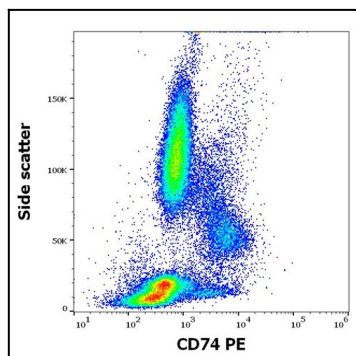


Figure 1: Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD74 (LN2) PE antibody (20  $\mu$ l reagent / 100  $\mu$ l of peripheral whole blood).

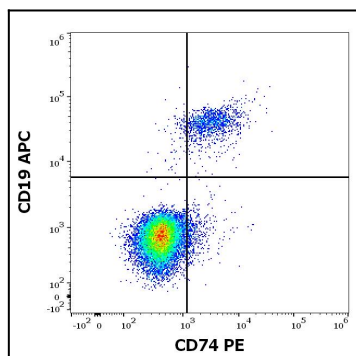


Figure 2: Flow cytometry multicolor surface staining of human lymphocytes stained using anti-human CD19 (4G7) APC antibody (10  $\mu$ l reagent / 100  $\mu$ l of peripheral whole blood) and anti-human CD74 (LN2) PE antibody (20  $\mu$ l reagent / 100  $\mu$ l of peripheral whole blood).

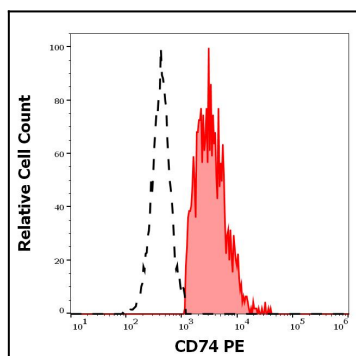


Figure 3: Separation of human CD74 positive B cells (red-filled) from CD74 negative CD19 negative lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD74 (LN2) PE antibody (20  $\mu$ l reagent / 100  $\mu$ l of peripheral whole blood).