anti-human CD53 FITC-conjugated

FITC - conjugated monoclonal antibody HI36 to CD53 (Human)

Cat-No: **21819533** 500 µl

Clone: HI36

Specificity: The antibody HI36 recognizes a 32-40 kDa type III, tetraspan membrane glycoprotein called TM4. CD53 antigen appears to be the marker with the strictest specificity for hematopoietic cells expressing all leukocytes including plasma cells, but not on platelets, erythrocytes and non-hematopoietic cells. The antibody HI29 mediates signal transduction.

Isotype subclass: Mouse IgG3

Form: The purified antibody is conjugated with Fluorescein isothiocyanate (FITC) under optimum conditions. The reagent is adjusted for direct use. No reconstitution is necessary.

Physical state: Liquid

Buffer/Additives/Preservative: PBS containing 1 % BSA and 0.09 % sodium azide (pH 7.2)

Expiration date: The reagent is stable until the expiry date stated on the vial label.

Storage conditions: Store at 4 °C. Avoid prolonged exposure to light.

Application: Flow Cytometry

References:

*) Shen DC., Chen Z., Bai JF., et al., Properties and preliminary apllication of three monoclonal antibodies of non-lineage antigens- CD45, CD45R and CD53. J. Monoclonal Antibody. 7(1)(: 53

*) Knapp, W., B. Dorken, E.P. Rieber, et al., eds. 1989. Leucocyte Typing VI: White Cell Differentiation Antigens. P: 674-677, 1088 Oxford University Press, New York

Background: CD53 is a tetraspanin family transmembrane glycoprotein expressed in the lymphoid-myeloid lineage. This molecule has been reported to form complexes with other leukocyte surface proteins such as CD2, CD19, CD21, MHC II, VLA-4 or tetraspanins CD37, CD81 and CD82, thus probably modulating various signaling processes. CD53 is involved in radioresistancy of tumour cells and its triggering has anti-apoptotic effect. In thymus, CD53 is up-regulated in response to positive selection signals during T cell development, and is strongly expressed upon macrophage exposure to bacterial lipopolysaccharide, whereas stimulation of neutrophils results in down-regulation of CD53 expression.

Warning: Sodium azide is harmful if swallowed (R22). Keep out of reach of children (S2). Keep away from food, drink and animal feeding stuff (S13). Wear suitable protective clothing (S36). If swallowed, seek medical advice immediately and show this container or label (S46). Contact with acids liberates very toxic gas (R32). Azide compounds should be flushed with large volumes of water during disposal to avoid deposits in lead or copper plumbing where explosive conditions can develop.

This material is offered for **research use only.** Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

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