anti-human CD43

Monoclonal antibody MEM-59 to human CD43

Cat-No: **21270431** 100 μg in 100 μl

Clone: MEM-59

Specificity: The antibody MEM-59 recognizes neuraminidase-sensitive epitope on CD43 (Leukosialin), a 95-135 kDa type I transmembrane glycoprotein (mucin-type) which is involved in lymphocyte activation. CD43 is expressed by platelets and at high levels on the surface of all leukocytes; it is negative on resting B lymphocytes and erythrocytes. HLDA IV; WS Code NL 604m, HLDA V; WS Code AS S290

Isotype subclass: Mouse IgG1

Form: Purified from cell culture supernatant by Protein-A affinity chromatography.

Purity: > 95% (by SDS-PAGE)

Physical state: Liquid

Buffer/Additives/Preservative: PBS containing 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 -20°C. Avoid freeze and thaw cycles.

Application: Flow Cytometry, Immunofluorescence, Immunohistochemistry, Immunoprecipitation, Western Blot

Background: CD43 (leukosialin, sialophorin) is a transmembrane mucin-like protein with high negative charge, expressed on the surface of most hematopoietic cells. CD43 contributes to a repulsive barrier that interferes with cellular adhesion, however, in certain cases also promotes leukocyte aggregation. By interaction with actin-binding proteins ezrin and moesin CD43 plays a regulatory role in remodeling T-cell morphology and regulates cell-cell interactions during lymphocyte traffic. CD43 signaling both enhances LFA-1 adhesiveness and counteracts LFA-1 induction via other receptors. Expression of CD43 causes induction of functionally active tumour suppressor p53 protein, but in case of p53 and ARF defficiency CD43 promotes tumour proliferation and viability. It appears to be an important modulator of leukocyte functions.

References:

- 1). Deckert, M. et al., Eur. J. Immunol. 22, 2943, 1992.
- 2.) Alvarado, M. et al., Eur. J. Immunol. 25, 1051, 1995.
- 3.) Leukocyte Typing VI. Kishimoto T. et al. (Eds.), Garland Publishing Inc. (1997).
- 4.) Cermak, L. et al., J. Biol. Chem. 227, 7955, 2002.

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.

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