Monoclonal Antibody to CD43
Purified Antibody (0.1 mg)

Clone: MEM-59
Isotype: Mouse IgG1
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 604
HLDA V; WS Code AS S290

Regulatory Status: RUO
Immunogen: Human T lymphocytes.
Species Reactivity: Human
Application: Flow Cytometry
Recommended dilution: 1 µg/ml
Immunoprecipitation
Western Blotting
Immunohistochemistry (paraffin sections)
Positive tissue: spleen, thymus, tonsil
Recommended dilution: 10 µg/ml
Functional Application
The antibody MEM-59 activates T lymphocytes and also induces apoptosis in hemopoietic progenitor cells.

Purity: > 95% (by SDS-PAGE)
Purification: Purified by protein-A affinity chromatography
Concentration: 1 mg/ml
Storage Buffer: Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4
Storage / Stability: Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial label.
Expiration: See vial label
Lot Number: See vial label

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 deficiency CD43 promotes tumour proliferation and viability. It appears to be an important modulator of leukocyte functions.
References:


*Leukocyte Typing IV., Knapp W. et al. (Eds.), Oxford University Press (1989).


