anti-human CD53

Monoclonal Antibody MEM-53 to CD53 (Human)

Cat-No: 21270531

100 µg in 100 µl

Clone: MEM-53

Specificity: The antibody MEM-53 reacts with CD53, a 32-40 kDa tetraspanin family glycoprotein exclusivelly expressed on leukocytes; it is not present on platelets, red blood cells and non-hematopoietic cells. The antibody MEM-53 reacts also with deglycosylated molecule (molecular weight of the antigen is reduced by 15 kDa using endoglycosidase F).

HLDA IV; WS Code NL 59 / HLDA V; WS Code B CD53.5 / HLDA V; WS Code BP BP287 /HLDA V; WS Code T T-096 /HLDA V; WS Code X XB004

Isotype subclass: Mouse IgG1

Immunogen: Leukocytes of pacient suffering from a LGL-type leukemia.

Form: Purified from ascites by protein-A affinity chromatography

Purity: > 95% (by SDS-PAGE)

Physical state: Liquid

Buffer/Additives/Preservative: PBS with 0.09 % sodium azide (pH 7.4).

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

Storage conditions: Store at 4 °C. For long-term storage aliquot and store at -20°C. Avoid freeze/thaw cycles.

Application: Flow Cytometry, Immunoprecipitation, Western Blotting, Immunohistochemistry: (frozen sections) suitable for discrimination of lymphomas from other tumors

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.

References:

Bazil V. et al., Folia Biol. (Praha) 35, 289 (1989). Leucocyte Typing IV. Knapp W et al. (Eds.), Oxford University Press (1989). Angelisova P. et al., Immunogenetics 32, 281 (1990). Olweus J. et al., J. Immunol. 151, 707 (1993). Rasmussen A.-M. et al., J. Immunol. 153, 4997 (1994).

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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