CD7 Monoclonal Mouse Antibody (HuLy-m2)

Product Description

Recognizes a protein of 40 kDa, identified as CD7 (Workshop IV; Code T165). CD7 is a member of the immunoglobulin gene superfamily. Its N-terminal amino acids 1-107 are highly homologous to Ig kappa-L chains whereas the carboxyl-terminal region of the extracellular domain is proline-rich and has been postulated to form a stalk from which the Ig domain projects. CD7 is expressed on the majority of immature and mature T-lymphocytes, and T cell leukemia. It is also found on natural killer cells, a small subpopulation of normal B cells and on malignant B cells. Cross-linking surface CD7 positively modulates T cell and NK cell activity as measured by calcium fluxes, expression of adhesion molecules, cytokine secretion and proliferation. CD7 associates directly with phosphoinositol 3′-kinase. CD7 ligation induces production of D-3 phosphoinositides and tyrosine phosphorylation.

References

Note: References for this clone sold by other suppliers may be listed for expected applications.

1. Transplantation 1984, 38(2):143-147.
2. J Histochem Cytochem (1985) 33(12): 1183-1189. (IF)

Product attributes

Antibody number	#1252
Antibody reactivity (target)	CD7
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	HuLy-m2
Isotype	IgG2a, kappa
Molecular weight	40 kDa
Synonyms	GP40; Leu9; p41; T-cell leukemia antigen; T-cell surface antigen Leu-9; Tp40; TP41
Human gene symbol	CD7
Entrez gene ID	924
SwissProt	P09564
Unigene	186820
Immunogen	Human thymocytes
Antibody target cellular localization	Plasma membrane
Expected antibody applications	IF (published for clone)
Species reactivity	Human
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Flow cytometry: 0.5-1 ug/million cells, Immunofluorescence: 0.5-1 ug/mL, Optimal dilution for a specific application should be determined by user
Positive control	Jurkat, HUT-78, Molt-4, CEM cells, or human peripheral blood lymphocytes. Lymph node and tonsil.
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Cell/tissue expression	NK cells, T-cells
Antibody research areas	Immunology, Signal transduction