ARG62876
anti-CD5 antibody [MEM-32]

Package: 100 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [MEM-32] recognizes CD5
Tested Reactivity	Hu
Tested Application	ELISA, FACS, IHC-P, IP, WB
Specificity	The clone MEM-32 reacts with the cell surface glycoprotein CD5, a 67kDa single-chain transmembrane glycoprotein expressed on mature T-lymphocytes, most of thymocytes and B-lymphocytes subset (B-1a lymphocytes). HLDA III; WS Code T 523
Host	Mouse
Clonality	Monoclonal
Clone	MEM-32
Isotype	IgG1
Target Name	CD5
Immunogen	Crude thymus membrane fraction.
Conjugation	Un-conjugated
Alternate Names	CD antigen CD5; Lymphocyte antigen T1/Leu-1; LEU1; T-cell surface glycoprotein CD5; T1

Application Instructions

Application table

Application	Dilution
ELISA	Assay-dependent
FACS	2 µg/ml
IHC-P	20 µg/ml
IP	Assay-dependent
WB	Assay-dependent

Application Note: WB: Under non-reducing condition.
ELISA: The clone MEM-32 can be used in the sandwich ELISA as the capture antibody in pair with the detection antibody (clone CRIS1).
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Positive Control: IHC-P: Spleen

Properties

Form	Liquid
Purification	Purified from ascites by protein-A affinity chromatography.

Purity	> 95% (by SDS-PAGE)
Buffer	PBS (pH 7.4) and 15 mM Sodium azide
Preservative	15 mM Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 921 Human Swiss-port # P06127 Human
Gene Symbol	CD5
Gene Full Name	CD5 molecule
Background	CD5 antigen (T1; 67 kDa) is a human cell surface T-lymphocyte single-chain transmembrane glycoprotein. CD5 is expressed on all mature T-lymphocytes, most of thymocytes, subset of B-lymphocytes and on many T-cell leukemias and lymphomas. It is a type I membrane glycoprotein whose extracellular region contains three scavenger receptor cysteine-rich (SRCR) domains. The CD5 is a signal transducing molecule whose cytoplasmic tail is devoid of any intrinsic catalytic activity. CD5 modulates signaling through the antigen-specific receptor complex (TCR and BCR). CD5 crosslinking induces extracellular Ca++ mobilization, tyrosine phosphorylation of intracellular proteins and DAG production. Preliminary evidence shows protein associations with ZAP-70, p56lck, p59fyn, PC-PLC, etc. CD5 may serve as a dual receptor, giving either stimulatory or inhibitory signals depending both on the cell type and development stage. In thymocytes and B1a cells seems to provide inhibitory signals, in peripheral mature T lymhocytes it acts as a costimulatory signal receptor. CD5 is the phenotypic marker of a B cell subpopulation involved in the production of autoreactive antibodies. Disease relevance: CD5 is a phenotypic marker for some B cell lymphoproliferative disorders (B-CLL, Hairy cell leukemia, etc.). The CD5+ popuation is expanded in some autoimmune disorders (Rheumatoid Arthritis, etc.). Herpes virus infections induce loss of CD5 expression in the expanded CD8+ human T cells.
Function	May act as a receptor in regulating T-cell proliferation. [UniProt]
Highlight	Related products: CD5 antibodies; CD5 ELISA Kits; CD5 Duos / Panels; Anti-Mouse IgG secondary antibodies; Related news: Lymphoma
Research Area	Developmental Biology antibody; Immune System antibody
Calculated Mw	55 kDa
PTM	Phosphorylated on tyrosine residues by LYN; this creates binding sites for PTPN6/SHP-1.