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CD8A (Anti-Mouse) (Cytotoxic / Suppressor T-Cell Marker) Antibody - With BSA and Azide

Rat Monoclonal Antibody [Clone IBL-3/25]
Catalog # AH10904

Product Information

Application	IF, FC
Primary Accession	P01731
Other Accession	12525 (Mouse), 1858 (Mouse)
Reactivity	Mouse
Host	Rat
Clonality	Monoclonal
Isotype	Rat / IgG1, kappa
Clone Names	IBL-3/25
Calculated MW	27456

Additional Information

Gene ID	12525
Other Names	T-cell surface glycoprotein CD8 alpha chain, T-cell surface glycoprotein Lyt-2, CD8a, Cd8a, Lyt-2, Lyt2
Application Note	IF~~1:50~200 FC~~1:10~50
Format	200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	CD8A (Anti-Mouse) (Cytotoxic / Suppressor T-Cell Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Cd8a
Synonyms	Lyt-2, Lyt2
Function	Integral membrane glycoprotein that plays an essential role in the immune response and serves multiple functions in responses against both external and internal offenses. In T-cells, functions primarily as a coreceptor for MHC class I molecule:peptide complex. The antigens presented by class I peptides are derived from cytosolic proteins while class II derived from extracellular

	proteins. Interacts simultaneously with the T-cell receptor (TCR) and the MHC class I proteins presented by antigen presenting cells (APCs). In turn, recruits the Src kinase LCK to the vicinity of the TCR-CD3 complex. LCK then initiates different intracellular signaling pathways by phosphorylating various substrates ultimately leading to lymphokine production, motility, adhesion and activation of cytotoxic T- lymphocytes (CTLs). This mechanism enables CTLs to recognize and eliminate infected cells and tumor cells. In NK-cells, the presence of CD8A homodimers at the cell surface provides a survival mechanism allowing conjugation and lysis of multiple target cells. CD8A homodimer molecules also promote the survival and differentiation of activated lymphocytes into memory CD8 T-cells.
Cellular Location	Cell membrane {ECO:0000250|UniProtKB:P01732}; Single-pass type I membrane protein {ECO:0000250|UniProtKB:P01732} Note=Cd8a localizes to lipid rafts only when associated with its partner Cd8b. {ECO:0000250|UniProtKB:P01732}

Background

Recognizes a protein of 32kDa, identified as CD8a (also known as CD8 chain, T cell co-receptor). CD8 molecule consists of two chains, termed and chain, which are expressed as a disulphide-linked heterodimer or as an homodimer. CD8 is expressed on T cell subset (cytotoxic/suppressor T cells), thymocytes and NK cells. The majority of CD8+ T-cells expresses CD8 as heterodimer. Some subpopulation of CD8+ T cells as well as NK cells may express homodimer. CD8 functions as a co-receptor in concert with TCR for binding the MHC class I/peptide complex. The HIV-2 envelope glycoprotein binds CD8 chain (but not chain). The cytoplasmic domain of CD8 associates with p56lck tyrosine kinase.

References

Knapp W. et. al. Leukocyte Typing IV, p342-343, Oxford University Press, 1989 Parnes JR, CD4 and CD8 in T cell lineage commitment: alterations induced by expression of a CD8/CD4 chimeric transgene. Semin Immunol 1994, 6:221-229. Leahy DJ. A structural view of CD4 and CD8. FASEB J. 1995,9(1):17-25

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.