ARG42466
anti-CD8b antibody [H35-17.2] (PE)

Package: 100 µg
Store at: 4°C

Summary

Product Description	PE-conjugated Rat Monoclonal antibody [H35-17.2] recognizes CD8b
Tested Reactivity	Ms
Tested Application	FACS
Specificity	The rat monoclonal antibody H35-17.2 recognizes an extracellular epitope of mouse CD8b, the 32-34 kDa beta chain of the CD8 coreceptor, expressed on cytotoxic T cells and thymocytes.
Host	Rat
Clonality	Monoclonal
Clone	H35-17.2
Isotype	IgG2b, kappa
Target Name	CD8b
Species	Mouse
Immunogen	Mouse CD8b.
Conjugation	PE
Alternate Names	LY3; CD8B1; CD antigen CD8b; LEU2; T-cell surface glycoprotein CD8 beta chain; P37; LYT3

Application Instructions

Application table

Application	Dilution
FACS	1 - 4 µg/ml

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form	Liquid
Purification	Purified
Buffer	PBS and 15 mM Sodium azide.
Preservative	15 mM Sodium azide
Concentration	0.5 mg/ml
Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. 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

Gene Symbol	CD8B
Gene Full Name	CD8b molecule
Background	The CD8 antigen is a cell surface glycoprotein found on most cytotoxic T lymphocytes that mediates efficient cell-cell interactions within the immune system. The CD8 antigen, acting as a coreceptor, and the T-cell receptor on the T lymphocyte recognize antigens displayed by an antigen presenting cell (APC) in the context of class I MHC molecules. The functional coreceptor is either a homodimer composed of two alpha chains, or a heterodimer composed of one alpha and one beta chain. Both alpha and beta chains share significant homology to immunoglobulin variable light chains. This gene encodes the CD8 beta chain isoforms. Multiple alternatively spliced transcript variants encoding distinct membrane associated or secreted isoforms have been described. A pseudogene, also located on chromosome 2, has been identified. [provided by RefSeq, May 2010]
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. A palmitoylation site in the cytoplasmic tail of CD8B chain contributes to partitioning of CD8 into the plasma membrane lipid rafts where signaling proteins are enriched. Once LCK recruited, it initiates different intracellular signaling pathways by phosphorylating various substrates ultimately leading to lymphokine production, motility, adhesion and activation of cytotoxic T-lymphocytes (CTLs). Additionally, plays a critical role in thymic selection of CD8+ T-cells. [UniProt]
Calculated Mw	24 kDa
PTM	Phosphorylated as a consequence of T-cell activation. [UniProt]
Cellular Localization	Isoform 1: Cell membrane. Note=Requires the partner CD8A for efficient cell surface expression (PubMed:3145196). The heterodimer CD8A/CD8B localizes to lipid rafts due to CD8B cytoplasmic tail palmitoylation. Isoform 2: Cell membrane. Isoform 3: Secreted. Isoform 4: Cell membrane. Isoform 5: Cell membrane. Isoform 6: Secreted. Isoform 7: Secreted. Isoform 8: Secreted. [UniProt]