

Product datasheet

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ARG42461 anti-CD8b antibody [H35-17.2]

Package: 100 μg Store at: -20°C

Summary

Product Description Rat Monoclonal antibody [H35-17.2] recognizes CD8b

Tested Reactivity Ms

Tested Application FACS, IHC-Fr, IP

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

Clone Monoclonal H35-17.2

Isotype IgG2b, kappa

Target Name CD8b

Species Mouse

ImmunogenMouse CD8b.ConjugationUn-conjugated

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
	IHC-Fr	Assay-dependent
	IP	Assay-dependent
• •	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid	
Purification	Purification with Protein A.	
Buffer	PBS 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.	

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

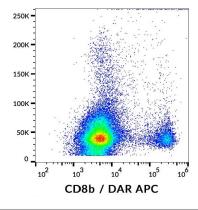
PTM

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 8: Secreted. [UniProt]

Images



ARG42461 anti-CD8b antibody [H35-17.2] FACS image

Flow Cytometry: Murine splenocytes stained with ARG42461 anti-CD8b antibody [H35-17.2], followed by APC-conjugated Donkey anti-Rat antibody.