

## ARG21995 anti-CD8a antibody [53-6.7] (Cyanine 5)

Package: 50 µg  
Store at: 4°C

### Summary

Product Description	Cyanine 5-conjugated Rat Monoclonal antibody [53-6.7] recognizes CD8a
Tested Reactivity	Ms
Tested Application	BL, Depletion, FACS, ICC/IF, IHC-Fr
Specificity	Mouse CD8α
Host	Rat
Clonality	Monoclonal
Clone	53-6.7
Isotype	IgG2a, kappa
Target Name	CD8a
Species	Mouse
Immunogen	Mouse Spleen cells or thymocyte membranes
Conjugation	Cyanine 5
Alternate Names	T-cell surface glycoprotein CD8 alpha chain; Leu2; p32; T-lymphocyte differentiation antigen T8/Leu-2; CD8; MAL; CD antigen CD8a

### Application Instructions

Application table	Application	Dilution
	BL	Assay-dependent
	Depletion	Assay-dependent
	FACS	< 0.2 µg/10 <sup>6</sup> cells
	ICC/IF	Assay-dependent
	IHC-Fr	Assay-dependent
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

### Properties

Form	Liquid
Buffer	PBS and 0.1% Sodium azide.
Preservative	0.1% Sodium azide
Concentration	0.1 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

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Database links

[GeneID: 12525 Mouse](#)

[Swiss-port # P01731 Mouse](#)

Gene Symbol

CD8A

Gene Full Name

CD8 antigen, alpha chain

Background

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 acts as a coreceptor with the T-cell receptor on the T lymphocyte to recognize antigens displayed by an antigen presenting cell in the context of class I MHC molecules. The coreceptor functions as either a homodimer composed of two alpha chains or as 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 alpha chain. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Nov 2011]

Function

CD8 is an 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. [UniProt]

Highlight

Related products:

[CD8 antibodies](#); [CD8 ELISA Kits](#); [CD8 Duos / Panels](#); [Anti-Rat IgG secondary antibodies](#);

Related news:

[New antibody panels and duos for Tumor immune microenvironment](#)

[Tumor-Infiltrating Lymphocytes \(TILs\)](#)

[Detecting exosomal HMGB1 for ICD research](#)

Research Area

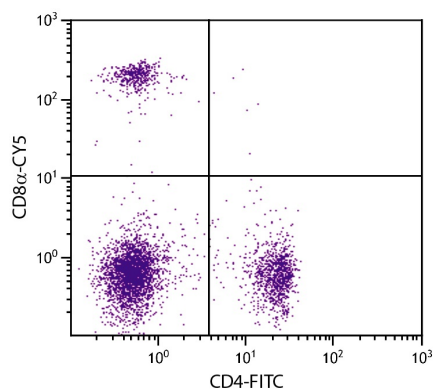
Developmental Biology antibody; Immune System antibody; Cytotoxic T antibody; Cytotoxic T Cell Surface Study antibody; Tumor-infiltrating Lymphocyte Study antibody

Calculated Mw

26 kDa

PTM

All of the five most C-terminal cysteines form inter-chain disulfide bonds in dimers and higher multimers, while the four N-terminal cysteines do not.



ARG21995 anti-CD8a antibody [53-6.7] (Cyanine 5) FACS image

Flow Cytometry: BALB/c Mouse splenocytes stained with ARG21995 anti-CD8a antibody [53-6.7] (Cyanine 5) and anti-CD4 antibody (FITC).