

ARG21144 anti-CD8 antibody [fCD8] (Biotin)

Package: 250 μg Store at: 4°C

Summary

Product Description	Biotin-conjugated Mouse Monoclonal antibody [fCD8] recognizes CD8
Tested Reactivity	Cat
Tested Application	FACS, ICC/IF, IHC-Fr
Specificity	Feline/Lion/Tsushima Leopard Cat CD8β.
Host	Mouse
Clonality	Monoclonal
Clone	fCD8
Isotype	IgG1, kappa
Target Name	CD8
Species	Cat
Immunogen	Feline thymocytes
Conjugation	Biotin
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
	FACS	< 1 µg/10^6 cells
	ICC/IF	Assay-dependent
	IHC-Fr	Assay-dependent
Application Note	* The dilutions indicate should be determined be	recommended starting dilutions and the optimal dilutions or concentrations by the scientist.

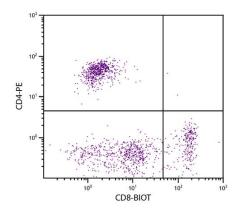
Properties

Form	Liquid
Buffer	PBS and 0.1% Sodium azide.
Preservative	0.1% 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	CD8A
Gene Full Name	CD8a molecule
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: <u>CD8 antibodies;</u> <u>CD8 ELISA Kits;</u> <u>CD8 Duos / Panels;</u> <u>Anti-Mouse IgG secondary antibodies;</u> Related news: <u>New antibody panels and duos for Tumor immune microenvironment</u> <u>Tumor-Infiltrating Lymphocytes (TILs)</u> <u>Detecting exosomal HMGB1 for ICD research</u>
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.

Images



ARG21144 anti-CD8 antibody [fCD8] (Biotin) FACS image

Flow Cytometry: Feline peripheral blood lymphocytes stained with ARG21144 anti-CD8 antibody [fCD8] (Biotin) and <u>ARG21149</u> anti-CD4 antibody [3-4F4] (PE) followed by Streptavidin (FITC).