

ARG22578 anti-CD8 antibody [OX-8] (FITC)

Package: 50 µg
Store at: 4°C

Summary

Product Description	FITC-conjugated Mouse Monoclonal antibody [OX-8] recognizes CD8 This antibody recognizes the rat CD8 alpha cell surface antigen, expressed by a subset of T lymphocytes, most thymocytes and the majority of NK cells. Clone MRC OX-8 is suitable for use in in vitro blocking studies (Popov et al.2001).Mouse anti Rat CD8α, clone MRC OX-8 has been described reacting with paraffin-embedded material following PLP Fixation (periodate-lysine paraformaldehyde) (Whiteland et al. 1995).Mouse anti Rat CD8α, clone MRC OX-8 is routinely tested in flow cytometry on rat splenocytes.
Tested Reactivity	Rat
Tested Application	FACS
Host	Mouse
Clonality	Monoclonal
Clone	OX-8
Isotype	IgG1
Target Name	CD8
Species	Rat
Immunogen	Rat thymocyte membrane glycoproteins.
Conjugation	FITC
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	Neat

Application Note
FACS: Use 10ul of the suggested working dilution to label 10⁶ cells in 100ul.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form	Liquid
Purification	Purified by ion exchange chromatography.
Buffer	PBS, 0.09% Sodium azide and 1% BSA.
Preservative	0.09% Sodium azide
Stabilizer	1% BSA
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

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	<p>Related products: CD8 antibodies; CD8 ELISA Kits; CD8 Duos / Panels; Anti-Mouse IgG secondary antibodies;</p> <p>Related news: New antibody panels and duos for Tumor immune microenvironment Tumor-Infiltrating Lymphocytes (TILs) Detecting exosomal HMGB1 for ICD research</p>
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.