

ARG22643 anti-CD8a antibody [MIL12] (PE)

Package: 50 tests
Store at: 4°C

Summary

Product Description	PE-conjugated Mouse Monoclonal antibody [MIL12] recognizes CD8a This antibody recognizes an epitope on the alpha chain of Porcine wCD8. Clone MIL12 was clustered at the Third International Swine CD Workshop (Haverson et al. 2001). Clone MIL12 was determined to bind to the CD8a epitope on the alpha chain based on its staining pattern on T lymphocytes and on its ability to block binding of the previously characterized CD8a antibody clone 76-2-11 to T lymphocytes (Saalmuller et al.2001).
Tested Reactivity	Pig
Tested Application	FACS
Host	Mouse
Clonality	Monoclonal
Clone	MIL12
Isotype	IgG2a
Target Name	CD8a
Species	Pig
Immunogen	Porcine mesenteric lymphocytes.
Conjugation	PE
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	<table> <tr> <th>Application</th><th>Dilution</th></tr> <tr> <td>FACS</td><td>Neat</td></tr> </table>	Application	Dilution	FACS	Neat
Application	Dilution				
FACS	Neat				
Application Note	<p>FACS: Use 10 µl of the suggested working dilution to label 10⁶ cells in 100 µl.</p> <p>* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.</p>				

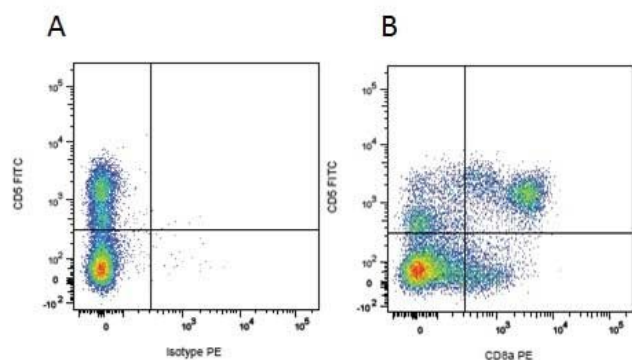
Properties

Form	Liquid
Purification	Purification with Protein A.
Buffer	PBS, 0.09% Sodium azide and 1% BSA.
Preservative	0.09% Sodium azide
Stabilizer	1% BSA
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.

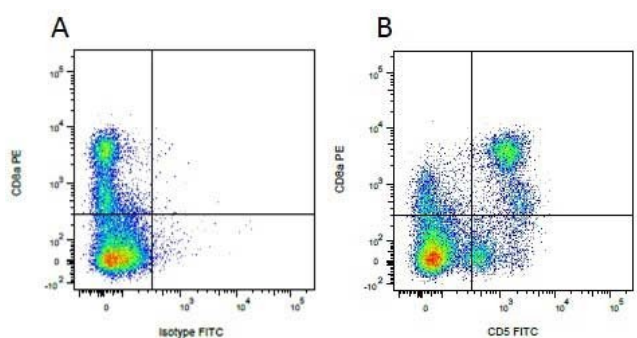
Bioinformation

Gene Symbol	CD8A
Gene Full Name	CD8a molecule
Background	<p>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]</p>
Function	<p>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]</p>
Highlight	<p>Related products: CD8 antibodies; CD8 ELISA Kits; CD8 Duos / Panels; Anti-Mouse IgG secondary antibodies; 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.



ARG22643 anti-CD8a antibody [MIL12] (PE) FACS image

Flow Cytometry: Figure A. anti-Porcine CD5 (FITC) and Mouse IgG1 isotype control (PE). Figure B. anti-Porcine CD5 (FITC) and ARG22643 anti-CD8a antibody [MIL12] (PE). All experiments performed on red cell lysed Porcine blood gated on mononuclear cells.



ARG22643 anti-CD8a antibody [MIL12] (PE) FACS image

Flow Cytometry: Figure A. ARG22643 anti-CD8a antibody [MIL12] (PE) and Mouse IgG2a isotype control (FITC). Figure B. ARG22643 anti-CD8a antibody [MIL12] (PE) and anti-Porcine CD5 (FITC). All experiments performed on red cell lysed Porcine blood gated on mononuclear cells.