abcam

ab22548

PE Anti-CD8 alpha antibody [MIL-12]

Anti-CD8 alpha antibody [MIL-12] conjugated to PE - suitable for flow cytometry, and reacts with pig samples. Clone [MIL-12] is a mouse monoclonal antibody.

Design your panel with our interactive flow cytometry panel builder. Click here.

Key facts

Isotype	IgG2a
Host species	Mouse
Conjugation	PE
Excitation/Emission	Ex: 480;565nm, Em: 578nm
Storage buffer	pH: 7.4 Preservative: 0.09% Sodium azide Constituents: PBS, 1% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	Cell preparation containing CD8 alpha protein. The exact immunogen used to generate this antibody is proprietary information.
Clone number	MIL-12
Purification technique	Affinity purification Protein G
Specificity	This antibody recognises a subset of porcine T lymphocytes.

Reactivity data

Flow Cyt

Tested

Species	Pig

Dilution info	-
Notes	ab91363 - Mouse monoclonal IgG2a, is suitable for use as an isotype control with this antibody.

Target data

See full target information CD8A

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C

Notes

Purified IgG conjugated to R. Phycoerythrin (RPE).

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	CD8 alpha also known as CD8A or CD8 protein is a glycoprotein subunit expressed on the surface of cytotoxic T lymphocytes. It has a mass of approximately 32 kDa. Found on the surface cell membrane CD8 alpha functions primarily in the immune response specifically in the recognition of antigens bound to major histocompatibility complex (MHC) class I molecules. Often scientists use CD8 antibodies for detection and CD8 IHC or immunohistochemistry for localization studies.
Biological function summary	The CD8 alpha protein plays a critical role in T-cell mediated immune responses. It forms a heterodimer with the CD8 beta chain creating the CD8 alpha-beta complex that strengthens T-cell interaction with antigen-presenting cells. CD8 alpha also helps in signaling processes that activate T cells equipping them to destroy infected or malignant cells. Researchers often study CD8 alpha peptides to understand its interactions better.
Pathways	CD8 alpha is integral to the T-cell receptor signaling pathway and the cytotoxic T lymphocyte (CTL) pathway. The T-cell receptor complex which includes the CD8 molecule transmits signals that are important for T-cell activation and function. CD8 interacts with key proteins such as the T-cell receptor (TCR) and MHC class I

molecules facilitating targeted responses against pathogens. These pathways highlight CD8 alpha's role in adaptive immunity.

Associated diseases and disorders

CD8 alpha is most prominently associated with viral infections and cancer. Conditions like HIV and some forms of leukemia show altered CD8 function highlighting the protein's role in immune surveillance. In HIV infection for instance CD8 T cells reduce in number impairing the immune response. CD8 alpha's connection to the immune system places it alongside other immune proteins such as CD4 and MHC molecules in the context of immune dysfunction.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

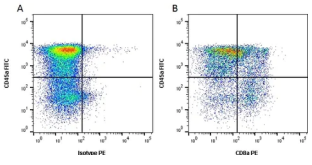
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

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Terms & Conditions.

3 product images



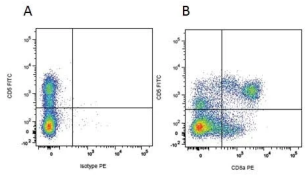
Flow Cytometry - PE Anti-CD8 alpha antibody [MIL-12] (ab22548)

CD8 alpha Flow Cytometry staining of Red cell lysed porcine blood using mouse Anti-CD8 alpha antibody

Flow cytometry staining of red cell lysed porcine blood with ab22548.
Figure A. FITC conjugated Mouse anti Porcine CD45a antibody and RPE conjugated Mouse IgG2a isotype control. Figure B. FITC conjugated Mouse anti Porcine CD45a antibody and RPE conjugated Mouse anti Porcine CD8a antibody, clone MIL12 (ab22548).

All experiments performed on red cell lysed porcine blood (10ul neat to label $1x10^6$ cells in 100ul) gated on lymphocytes.

Data acquired on the ZE5 Cell analyser.



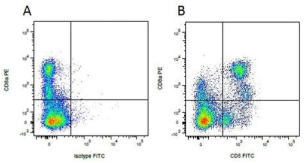
Flow Cytometry - PE Anti-CD8 alpha antibody [MIL-12] (ab22548)

CD8 alpha Flow Cytometry staining of Red cell lysed porcine blood using mouse Anti-CD8 alpha antibody

Flow cytometry staining of red cell lysed porcine blood with ab22548.
Figure A. FITC conjugated Mouse anti Porcine CD5 antibody and RPE conjugated mouse IgG1 isotype control. Figure B. FITC conjugated Mouse anti Porcine CD5 antibody and RPE conjugated Mouse anti Porcine CD8a antibody, clone MIL12 (ab22548).

All experiments performed on red cell lysed porcine blood (10ul neat to label $1x10^6$ cells in 100ul) gated on mononuclear cells.

Data acquired on the ZE5 Cell analyser.



Flow Cytometry - PE Anti-CD8 alpha antibody [MIL-12] (ab22548)

CD8 alpha Flow Cytometry staining of Red cell lysed porcine blood using mouse Anti-CD8 alpha antibody

Flow cytometry staining of red cell lysed porcine blood with ab22548.
Figure A. RPE conjugated Mouse anti Porcine CD8a antibody, clone MIL12 (ab22548) and FITC conjugated Mouse IgG2a isotype control. Figure B. RPE conjugated Mouse anti Porcine CD8a antibody, clone MIL12 (ab22548) and FITC conjugated Mouse anti Porcine CD5 antibody.

All experiments performed on red cell lysed porcine blood (10ul neat to label $1x10^6$ cells in 100ul) gated on mononuclear cells.

Data acquired on the ZE5 Cell analyser.

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