

ARG53901 anti-CD8 antibody [MEM-31] (PE)

Package: 100 tests
Store at: 4°C

Summary

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| Product Description | PE-conjugated Mouse Monoclonal antibody [MEM-31] recognizes CD8 |
| Tested Reactivity | Hu |
| Tested Application | FACS |
| Specificity | <p>The clone MEM-31 recognizes a conformationally-dependent epitope of CD8, a cell surface glycoprotein found on most cytotoxic T lymphocytes that mediates efficient cell-cell interactions within the immune system. CD8 is a disulfide-linked dimer and exists as a CD8 alpha/alpha homodimer or CD8 alpha/beta heterodimer (each monomer approx. 32-34 kDa).</p> <p>does not react with formaldehyde-fixed cells; negative in Western Blotting application.</p> <p>HLDA III; WS Code T 575</p> |
| Host | Mouse |
| Clonality | Monoclonal |
| Clone | MEM-31 |
| Isotype | IgG2a |
| Target Name | CD8 |
| Immunogen | Crude thymus membrane fraction. |
| 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><thead><tr><th>Application</th><th>Dilution</th></tr></thead><tbody><tr><td>FACS</td><td>20 µl / 10⁶ cells</td></tr></tbody></table> | Application | Dilution | FACS | 20 µl / 10 ⁶ cells |
|-------------------|--|-------------|----------|------|-------------------------------|
| Application | Dilution | | | | |
| FACS | 20 µl / 10 ⁶ cells | | | | |
| Application Note | * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. | | | | |

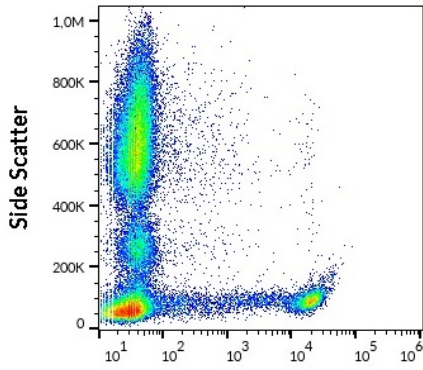
Properties

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|-------------------|---|
| Form | Liquid |
| Purification Note | The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary. |
| Buffer | PBS, 15 mM Sodium azide and 0.2% (w/v) high-grade protease free BSA |
| Preservative | 15 mM Sodium azide |
| Stabilizer | 0.2% (w/v) high-grade protease free BSA |

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| 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. |

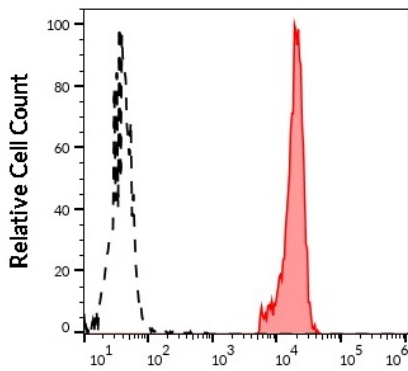
Bioinformation

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|----------------|--|
| Database links | GeneID: 925 Human Swiss-port # P01732 Human |
| 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. |



ARG53901 anti-CD8 antibody [MEM-31] (PE) FACS image

Flow Cytometry: Human peripheral whole blood stained with ARG53901 anti-CD8 antibody [MEM-31] (PE) (20 μ l reagent / 100 μ l of peripheral whole blood).



ARG53901 anti-CD8 antibody [MEM-31] (PE) FACS image

Flow Cytometry: Separation of human CD8 positive lymphocytes (red-filled) from human neutrophil granulocytes (black-dashed). Human peripheral whole blood stained with ARG53901 anti-CD8 antibody [MEM-31] (PE) (20 μ l reagent / 100 μ l of peripheral whole blood).