

APC anti-human CD8a Antibody

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|--------------------------|--|
| Catalog# / Size | 300911 / 25 tests 300912 / 100 tests |
| Clone | HIT8a |
| Regulatory Status | RUO |
| Workshop | V CD08.10 |
| Other Names | T8, Leu2 |
| Isotype | Mouse IgG1, κ |
| Description | CD8a is a 32-34 kD type I glycoprotein. It forms a homodimer (CD8a/a) or heterodimer (CD8a/b) with CD8b. CD8, also known as T8 and Leu2, is a member of the immunoglobulin superfamily found on the majority of thymocytes, a subset of peripheral blood T cells, and NK cells (which express almost exclusively CD8a homodimers). CD8 acts as a co-receptor with MHC class I-restricted T cell receptors in antigen recognition and T cell activation and has been shown to play a role in thymic differentiation. Two domains in CD8a are important for function: the extracellular IgSF domain binds the $\alpha 3$ domain of MHC class I and the cytoplasmic CXCP motif binds the tyrosine kinase p56 Lck. |

Product Details

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| Verified Reactivity | Human |
| Reported Reactivity | Chimpanzee, Common Marmoset |
| Antibody Type | Monoclonal |
| Host Species | Mouse |
| Formulation | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA) |
| Preparation | The antibody was purified by affinity chromatography, and conjugated with APC under optimal conditions. |
| Concentration | Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.) |
| Storage & Handling | The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze. |
| Application | FC - Quality tested |
| Recommended Usage | Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is 5 μ l per million cells in 100 μ l staining volume or 5 μ l per 100 μ l of whole blood. |
| Excitation Laser | Red Laser (633 nm) |
| Application Notes | Clone HIT8a recognizes the alpha chain of CD8 ⁵ . It does not block the binding of RPA-T8 antibody to CD8a. Additional reported applications of this antibody (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections ^{5,6} . This clone was tested in-house and does not work on formalin fixed paraffin-embedded (FFPE) tissue. |

Application References

(PubMed link indicates BioLegend citation)

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Product Citations

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RRID

AB_314115 (BioLegend Cat. No. 300911)
AB_314116 (BioLegend Cat. No. 300912)

Antigen Details

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|---------------------------|---|
| Structure | Ig superfamily, homodimer or heterodimer with CD8 β , 32-34 kD |
| Distribution | Majority of thymocytes, T cell subset, NK cells |
| Function | MHC class I co-receptor, thymic differentiation, T cell activation |
| Ligand/Receptor | MHC Class I molecules |
| Cell Type | Dendritic cells, NK cells, T cells, Thymocytes, Tregs |
| Biology Area | Immunology |
| Molecular Family | CD Molecules |
| Antigen References | 1. Barclay N, <i>et al.</i> 1993. The Leucocyte Antigen FactsBook. Academic Press Inc. San Diego. |
| Gene ID | 925 |

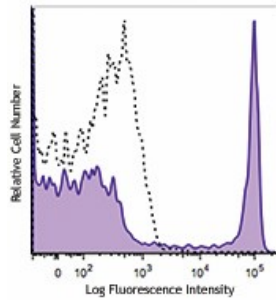
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

APC anti-human CD8a, Biotin anti-human CD8a, FITC anti-human CD8a, PE anti-human CD8a, PE/Cyanine5 anti-human CD8a, Purified anti-human CD8a, PE/Cyanine7 anti-human CD8a, Alexa Fluor® 488 anti-human CD8a, Alexa Fluor® 647 anti-human CD8a, Alexa Fluor® 700 anti-human CD8a, PerCP anti-human CD8a, PerCP/Cyanine5.5 anti-human CD8a, APC/Cyanine7 anti-human CD8a, Pacific Blue™ anti-human CD8a, PE/Dazzle™ 594 anti-human CD8a, APC/Fire™ 750 anti-human CD8a, Brilliant Violet 510™ anti-human CD8a, Brilliant Violet 605™ anti-human CD8a

Product Data



Human peripheral blood lymphocytes stained with HIT8a (clone HIT8a) APC (filled histogram) or mouse IgG1, κ APC isotype control (open histogram).

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