

Anti-Human CD8a Functional Grade Purified

Catalog Number: 16-0086

Also Known As: CD8 alpha, leu-2a

RUO: For Research Use Only

Product Information

Contents: Anti-Human CD8a Functional Grade Purified

REF Catalog Number: 16-0086

Clone: OKT8 (OKT-8)

Concentration: 1 mg/ml

Host/Isotype: Mouse IgG2a

Handling Conditions: Use in sterile environment.

Endotoxin Level: Less than 0.001 ng/ug antibody, as determined by the LAL assay.

Formulation: aqueous buffer, no sodium azide

Temperature Limitation: Store at 2-8°C.

LOT **Batch Code:** Refer to Vial

Use By: Refer to Vial

Description

The OKT8 monoclonal antibody reacts with the human CD8a molecule, an approximately 32-34 kDa cell surface receptor expressed either as a heterodimer with the CD8 β chain (CD8 $\alpha\beta$) or as a homodimer (CD8 $\alpha\alpha$). A majority of thymocytes and a subpopulation of mature T cells and NK cells express CD8a. CD8 binds to MHC class I and through its association with protein tyrosine kinase p56lck plays a role in T-cell development and activation of mature T cells. Preliminary testing indicates that OKT8 and two other mouse anti-human CD8 antibodies (clone RPA-T8, Cat. No.14-0088 and clone HIT8a, Cat. No.14-0089) do not compete with each other for binding to human peripheral blood leukocytes by flow cytometric analysis, suggesting that they do not bind to similar epitopes or block each other by steric hindrance.

Applications Reported

This OKT8 (OKT-8) antibody has been reported for use in flow cytometric analysis.

Applications Tested

This OKT8 (OKT-8) antibody has been tested by flow cytometric analysis of human peripheral blood leukocytes. This can be used at less than or equal to 0.25 μg per test. A test is defined as the amount (μg) of antibody that will stain a cell sample in a final volume of 100 μL . Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

Kay HD, Horwitz DA. 1980. Evidence by reactivity with hybridoma antibodies for a probable myeloid origin of peripheral blood cells active in natural cytotoxicity and antibody-dependent cell-mediated cytotoxicity. *J Clin Invest.* 66(4):847-51.

Sayos J, Wu C, Morra M, Wang N, Zhang X, Allen D, van Schaik S, Notarangelo L, Geha R, Roncarolo MG, Oettgen H, De Vries JE, Aversa G, Terhorst C. The X-linked lymphoproliferative-disease gene product SAP regulates signals induced through the co-receptor SLAM. *Nature.* 1998 Oct 1;395(6701):462-9. (OKT8, IP, PubMed)

Thomas Y, Sosman J, Irigoyen O, Friedman SM, Kung PC, Goldstein G, Chess L. 1980. Functional analysis of human T cell subsets defined by monoclonal antibodies. I. Collaborative T-T interactions in the immunoregulation of B cell differentiation. *J Immunol.* 125(6):2402-8.

Campanelli R, Palermo B, Garbelli S, Mantovani S, Lucchi P, Necker A, Lantelme E, Giachino C. 2002. Human CD8 co-receptor is strictly involved in MHC-peptide tetramer-TCR binding and T cell activation. *Int Immunol.* 14(1):39-44.

Related Products

11-4011 Anti-Mouse IgG FITC

11-4317 Streptavidin FITC

12-4317 Streptavidin PE

13-4013 Anti-Mouse IgG Biotin (Polyclonal)

16-4724 Mouse IgG2a K Isotype Control Functional Grade Purified

17-4317 Streptavidin APC

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