

An Affymetrix Company

Anti-Human CD58 (LFA-3) Functional Grade Purified

Catalog Number: 16-0578

RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Contents: Anti-Human CD58 (LFA-3)

Functional Grade Purified

REF Catalog Number: 16-0578

Clone: TS2/9

Concentration: 1 mg/mL Host/Isotype: Mouse IgG1

Handling Conditions: Use in sterile

environment.

Endotoxin: 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.

Batch Code: Refer to vial Use By: Refer to vial

Description

The TS2/9 antibody recognizes human CD58, which is also known as Lymphocyte Associated Antigen-3 (LFA-3). CD58 exists both as a transmembrane protein as well as a GPI-linked extracellular protein. It has been shown that cells can express both forms concurrently. In addition, soluble CD58 has also been observed in serum, urine and synoval fluid of rheumatoid arthritis patients. CD58 is found on non-hematopoietic and most hematopoietic cells. Binding to its ligand CD2, which is present on T cells, initiates a signaling pathway which includes phosphorylation and results in release of cytokines. CD58 has been shown to be important in adhesion to various cell types, T cell activation, cytokine production and cytoxicity.

The TS2/9 antibody has been reported to induce signaling events upon crosslinking. The epitope is in domain 1 of the immunoglobulin region.

Applications Reported

This TS2/9 antibody has been reported for use in flow cytometric analysis.

Applications Tested

This TS2/9 antibody has been tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at less than or equal to 0.25 μ g per test. A test is defined as the amount (μ g) of antibody that will stain a cell sample in a final volume of 100 μ L. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

Ariel O, Levi Y, Hollander N. Signal Transduction by CD58: The transmembrane isoform transmits signals outside lipid rafts independently of the GPI-anchored isoform. Cellular Signaling. 2009:21:1100-1108. (**TS/9**, functional crosslinking, PubMed)

Osborn L, Day ES, Miller GT, Karpusas M, Tizard R, Meuer SC, Hochman PS. Amino acid residues required for binding of Lymphocyte Function-associated Antigen 3 (CD58) to its Counter-Receptor CD2. J. Exp. Med. January 1995:181:429-434.

Diaz-Sanchez, Chegini S, Zhang K, Saxon A. CD58 (LFA-3) stimulation provides a signal for human isotype switching and IgE production distinct from CD40. J. Immunol. 1994:153:10-20. (**TS/9**, FA, PubMed)

Hahn WC, Burakoff SJ, Bierer BE. Signal Transduction Pathways involved in T-cell receptor-induced regulation of CD2 avidity for CD58. J. Immunol. 1993:150:2607-2619. (**TS/9**, FC, PubMed)

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Sanchez-Madrid F, Krensky AM, Ware CF, Robbins E, Strominger JL, Burakoff SJ, Springer TA. Three distinct antigens associated with human T-lymphocyte-mediated cytolysis: LFA-1, LFA-2, and LFA-3. Proc. Natl. Acad. Sci



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USA. December 1982:79:7489-7493.

Related Products

00-4300 10X RBC Lysis Buffer (Multi-species) 16-4714 Mouse IgG1 K Isotype Control Functional Grade Purified (P3.6.2.8.1)