

CD2 / Lymphocyte Function Antigen 2 (LFA-2) Antibody -With BSA and Azide

Mouse Monoclonal Antibody [Clone HuLy-m1] Catalog # AH12591

Product Information

| Application Primary Accession | IF, FC <u>P06729</u> |
|----------------------------------|-------------------------|
| Other Accession | <u>914, 523500</u> |
| Reactivity | Human, Cat |
| Host | Mouse |
| Clonality | Monoclonal |
| Isotype | Mouse / IgG2b, kappa |
| Clone Names | HuLy-m1 |
| Calculated MW | 39448 |

Additional Information

| Gene ID | 914 |
|------------------|---|
| Other Names | T-cell surface antigen CD2, Erythrocyte receptor, LFA-2, LFA-3 receptor, Rosette receptor, T-cell surface antigen T11/Leu-5, CD2, CD2, SRBC |
| Application Note | IF~~1:50~200 FC~~1:10~50 |
| Storage | Store at 2 to 8°C.Antibody is stable for 24 months. |
| Precautions | CD2 / Lymphocyte Function Antigen 2 (LFA-2) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures. |

| Name | CD2 |
|-------------------|--|
| Synonyms | SRBC |
| Function | CD2 interacts with lymphocyte function-associated antigen CD58 (LFA-3) and CD48/BCM1 to mediate adhesion between T-cells and other cell types. CD2 is implicated in the triggering of T-cells, the cytoplasmic domain is implicated in the signaling function. |
| Cellular Location | Cell membrane; Single-pass type I membrane protein |
| Tissue Location | Expressed in natural killer cells (at protein level). |

Background

CD2 interacts through its amino-terminal domain with the extracellular domain of CD58 (also designated CD2 ligand) to mediate cell adhesion. CD2/CD58 binding can enhance antigen-specific T cell activation. CD2 is a transmembrane glycoprotein that is expressed on peripheral blood T lymphocytes, NK cells and thymocytes. CD58 is a heavily glycosylated protein with a broad tissue distribution in hematopoietic and other cells, including endothelium. Interaction between CD2 and its counter receptor LFA3 (CD58) on opposing cells optimizes immune system recognition, thereby facilitating communication between helper T lymphocytes and antigen-presenting cells, as well as between cytolytic effectors and target cells.

References

Schlossman SF et al. Eds. Leukocyte Typing V, p342-352, Oxford University Press, Oxford, 1995. | Thurlow PJ, A monoclonal anti-pan-T-cell antibody. In vitro and in vivo studies. Transplantation 1983, 36(3):293-298 | Kuramochi T, et al.Characterization of feline T and B cells. Am J Vet Res 1987 Feb;48(2):183-185 | Dustin ML et al. Purified lymphocyte function-associated antigen 3 binds to CD2 and mediates T lymphocyte adhesion. J Exp Med 1987, 165:677-692 | Warren HS et al. A carbohydrate structure associated with CD15 (Lewis x) on myeloid cells is a novel ligand for human CD2. J Immunol 1996, 156(8):2866-2873. | Monostori E, et al. Activation of human T lymphocytes via the CD2 antigen results in tyrosine phosphorylation of T cell antigen receptor zeta-chains. J Immunol 1990, 144(3):1010-1014 | Lin H et al. Association of p59(fyn) with the T lymphocyte costimulatory receptor CD2. Binding of the Fyn Src homology (SH) 3 domain is regulated by the Fyn SH2 domain. J Biol Chem 1998, 273(31):19914-19921 | Marie-Cardine A et al. Recruitment of activated p56lck on endosomes of CD2-triggered T cells, colocalization with ZAP-70. J Biol Chem 1996, 271(34):20734-20739 | Rouleau M et al. CD2 induced apoptosis of peripheral T cells. Transplant Proc 1997, 29(5):2377-2378. | Bell GM and Imboden JB. CD2 and the regulation of T cell anergy. J Immunol 1995, 155(6):2805-280

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