

Anti-CD2 Antibody

Catalog # ABO11051

Specification

Anti-CD2 Antibody - Product Information

ApplicationWBPrimary AccessionP08920HostRabbitReactivityMouse, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for T-cell surface antigen CD2(CD2) detection. Tested with WB in
Mouse;Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-CD2 Antibody - Additional Information

Gene ID 12481

Other Names T-cell surface antigen CD2, LFA-2, LFA-3 receptor, Lymphocyte antigen 37, Ly-37, T-cell surface antigen T11/Leu-5, CD2, Cd2, Ly-37

Calculated MW 38415 MW KDa

Application Details Western blot, 0.1-0.5 μg/ml, Mouse, Rat

Subcellular Localization Membrane; Single-pass type I membrane protein.

Protein Name T-cell surface antigen CD2

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of mouse CD2(224-242aa FIFCICKRRKRNRRKDEE), different from the related rat sequence by two amino acids.

Purification Immunogen affinity purified.

Cross Reactivity



No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities Contains 1 Ig-like C2-type (immunoglobulin-like) domain.

Anti-CD2 Antibody - Protein Information

Name Cd2

Synonyms Ly-37

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 Detected in thymus and spleen.

Anti-CD2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-CD2 Antibody - Images



Anti-CD2 antibody, ABO11051, Western blottingLane 1: Rat Spleen Cell LysateLane 2: NIH/3T3 Cell Lysate

Anti-CD2 Antibody - Background

CD2(cluster of differentiation 2) is a cell adhesion molecule found on the surface of T cells and natural killer(NK) cells. It has also been called T-cell surface antigen T11/Leu-5, LFA-2, LFA-3 receptor, erythrocyte receptor and rosette receptor. Monoclonal antibodies directed against CD2 inhibit the formation of rosettes with sheep erythrocytes, indicating that CD2 is the erythrocyte receptor or is closely associated with it. It is one of the earliest T-cell markers, being present on more than 95% of thymocytes; it is also found on some natural killer cells but not on B lymphocytes. Due to its structural characteristics, CD2 is a member of the immunoglobulin superfamily; it possesses two immunoglobulin-like domains in its extracellular portionThe localization of CD2 to 1p13 was established by in situ hybridization. By Southern blotting of DNA from a panel of somatic cell hybrids, Clayton et al.(1988) assigned the CD2 gene to human chromosome 1 and murine chromosome 3.CD2 interacts with other adhesion molecules, such as lymphocyte function-associated antigen-3(LFA-3/CD58) in humans, or CD48 in rodents, which are expressed on the surfaces of other cells. With the use of transgenic mice, such an LCR was identified within the 3-prime flanking region of the human CD2 gene.