Mouse Anti-Human CD2 Monoclonal Antibody

Mouse, Monoclonal (CD2)

Cat. No. DMAB2490MH
Lot. No. (See product label)

PRODUCT INFORMATION

Antigen Description: CD2 is a surface antigen of the human T-lymphocyte lineage that is expressed on all peripheral blood T cells. 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. 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.
Immunogen: Human peripheral T cells.
Isotype: IgG_{2a}
Specificity: CD2
Clone: H12
Host animal: Mouse
Source: Cell culture
Format: Phyco, Liquid
Purification: This fluorochrome has been covalently conjugated to Anti-CD2 and Chromategraphically purified to remove unconjugated antibody and dye, while achieving a fluorochrome/protein (F/P) molar ratio between 0.7 - 1.3. R-phycoerythrin has a maximum absorbance at 565.5nm and an emission maximum at 578nm. The fluorochrome/protein (F/P) molar ratio of this conjugate is 1.043.
Application: Appropriate pairs of anti-CD2 antibodies will stimulate peripheral T-cell proliferation and effector function antigen (LFA-3/CD58), the binding of which augments T-cell activation mediated by the T-cell antigen receptor (TCR). Anti-Human CD2 can be used to deplete CD2 positive cells by complement-mediated cytotoxicity. We recommend using 1µg to satin 1.0 x 10^6 cells in flow cytometric applications. Each laboratory should determine an optimum working titer for use in its particular application. Centrifuge before opening to ensure complete recovery of vial contents.

PACKAGING

Concentration: 100µg/ml (OD280nm)
Buffer: 00.01M PBS, pH 7.2, containing 1.0% BSA and 2mM EDTA
Preservative: 0.1% Sodium azide
Storage: Store (protected from light) at 2-8°C. **DO NOT FREEZE.**
Warning: This product contains sodium azide, which has been classified as Xn (Harmful), in European Directive 67/548/EEC in the concentration range of 0.1 – 1.0 %. When disposing of this reagent through lead or copper plumbing, flush with copious volumes of water to prevent azide build-up in drains.

IMMUNOGEN GENE INFORMATION

Gene Name: CD2 CD2 molecule [Homo sapiens]
Official Symbol: CD2
Synonyms: T11; SRBC; FLJ46032; CD2; T-cell surface antigen CD2; LFA-2; LFA-3 receptor; Rosette receptor; OTTHUMP00000024366; erythrocyte receptor; lymphocyte-function antigen-2; T-cell surface antigen T11/Leu-5; CD2 antigen (p50), sheep red blood cell receptor
GeneID: 914
mRNA Refseq: NM_001767
Protein Refseq: NP_001758
MIM: 186990
UniProt ID: P06729
Chromosome Location: 1q13
Pathway: Cell adhesion molecules (CAMs), organism-specific biosystem; Cell adhesion molecules (CAMs), conserved biosystem; Cell surface interactions at the vascular wall, org- anism-specific biosystem; Hematopoietic cell lineage, organism-specific biosystem; Hematopoietic cell lineage, conserv- ed biosystem; Hemostasis, organism-specific biosystem; T Cell Receptor Signaling Pathway, organism-specific biosystem
Function: eukaryotic cell surface binding; protein binding; protein homodimerization activity; receptor activity

REFERENCES

1. Brown, M. H., Gorman, P. A., Sewell, W. A., Spurr, N. K., Sheer, D., Crumpton, M. J. The gene coding for the human T-lymphocyte CD2 antigen is located on chromosome 1p. Hum. Genet. 76: 191-195, 1987.
2. Clayton, L. K., Ramachandran, H., Pravtcheva, D., Chen, Y.-F., Diamond, D. J., Ruddle, F. H., Reinherz, E. L. The gene for T11 (CD2) maps to chromosome 1 in humans and to chromosome 3 in mice. J. Immun. 140: 3617-3621, 1988.

45-16 Ramsey Road Shirley, NY 11967, USA
Tel: 631-559-9269 ·Fax:631-207-8356
E-mail: info@creative-biomart.com
www.creative-biomart.com