

Anti-Human CD2 Antibody, Clone RPA-2.10

Antibodies

Mouse monoclonal IgG1 antibody
against human, rhesus, cynomolgus
CD2, unconjugated

Catalog #60007

100 µg 0.5 mg/mL



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TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713

INFO@STEMCELL.COM • TECHSUPPORT@STEMCELL.COM

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Product Description

The RPA-2.10 antibody reacts with CD2, an ~50 kDa type I transmembrane glycoprotein and a member of the immunoglobulin (Ig) superfamily; two Ig-like domains are located in its extracellular portion. CD2 is broadly expressed on peripheral T and NK cells, dendritic cells, erythrocytes, most thymic T cells, subsets of thymic B cells, and on the endothelium. CD2 expression appears early during T cell differentiation. Aberrant expression has been observed in some lymphomas and myeloid leukemias. CD2 is critically important for T cell activation and signaling, as well as lymphocyte adhesion. The primary ligand for CD2 is CD58 (LFA-3) located on antigen-presenting cells, with additional ligands comprising CD15 (SSEA-1), CD48, and CD59. Notably, the RPA-2.10 antibody blocks the mixed lymphocyte reaction.

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|----------------------|---|
| Target Antigen Name: | CD2 |
| Alternative Names: | LFA-2, SRBC-R, T11 |
| Gene ID: | 914 |
| Species Reactivity: | Human, Rhesus, Cynomolgus, Baboon, Chimpanzee, Capuchin Monkey, Pigtailed Macaque, Squirrel Monkey, Pig |
| Host Species: | Mouse |
| Clonality: | Monoclonal |
| Clone: | RPA-2.10 |
| Isotype: | IgG1, kappa |
| Immunogen: | Human CD2 recombinant protein |
| Conjugate: | Unconjugated |

Applications

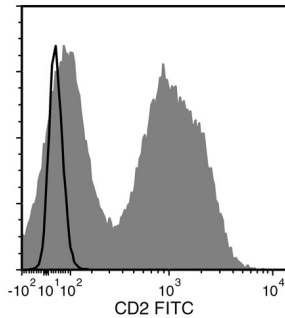
| | |
|-----------------------|--|
| Verified: | FC |
| Reported: | FA, FC, ICC, IF, IHC, WB |
| Special Applications: | This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ HLA Chimerism Whole Blood CD3 Positive Selection Kit (Catalog #17871). |

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence-activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

Properties

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|------------------------|--|
| Formulation: | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide |
| Purification: | The antibody was purified by affinity chromatography. |
| Stability and Storage: | Product stable at 2 - 8°C when stored undiluted. Do not freeze. For product expiry date, please contact techsupport@stemcell.com. |
| Directions for Use: | For flow cytometry, the suggested use of this antibody is $\leq 0.25 \mu\text{g}$ per 1×10^6 cells in 100 µL. It is recommended that the antibody be titrated for optimal performance for each application. |

Data



Flow cytometry analysis of human peripheral blood mononuclear cells (PBMCs) labeled with Anti-Human CD2 Antibody, Clone RPA-2.10, followed by Goat Anti-Mouse IgG (H+L) Antibody, Polyclonal, FITC (Catalog #60138FI) (filled histogram), or a mouse IgG1, kappa isotype control antibody followed by Goat Anti-Mouse IgG (H+L) Antibody, Polyclonal, FITC (solid line histogram).

Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, please visit our website at www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

References

1. Perona-Wright G et al. (2010) Sustained signaling by canonical helper T cell cytokines throughout the reactive lymph node. *Nat Immunol* 11(6): 520–6. (FC)
2. Thümmler K et al. (2010) Immune regulation by peripheral suppressor T cells induced upon homotypic T cell/T cell interactions. *J Leukoc Biol* 88(5): 1041–50. (FC)
3. Glatman Zaretsky A et al. (2009) T follicular helper cells differentiate from Th2 cells in response to helminth antigens. *J Exp Med* 206(5): 991–9. (FC, ICC, IF, IHC)
4. Kap YS et al. (2009) A monoclonal antibody selection for immunohistochemical examination of lymphoid tissues from non-human primates. *J Histochem Cytochem* 57(12): 1159–67. (IHC)
5. Piriou-Guzylack L & Salmon H. (2008) Membrane markers of the immune cells in swine: an update. *Vet Res* 39(6): 54.
6. Schernthaler GH et al. (2001) Expression, epitope analysis, and functional role of the LFA-2 antigen detectable on neoplastic mast cells. *Blood* 98(13): 3784–92. (FC)
7. Yoshino N et al. (2000) Upgrading of flow cytometric analysis for absolute counts, cytokines and other antigenic molecules of cynomolgus monkeys (*Macaca fascicularis*) by using anti-human cross-reactive antibodies. *Exp Anim* 49(2): 97–110. (FC)
8. Ozwara H et al. (1997) Flow cytometric analysis on reactivity of human T lymphocyte-specific and cytokine-receptor-specific antibodies with peripheral blood mononuclear cells of chimpanzee (*Pan troglodytes*), rhesus macaque (*Macaca mulatta*), and squirrel monkey (*Saimiri sciureus*). *J Med Primatol* 26(3): 164–71. (FC)
9. Knapp W et al. (Eds.). (1989) *Leucocyte Typing IV: White Cell Differentiation Antigens*. New York: Oxford University Press.
10. Aversa GG et al. (1987) RPA-2.10: an anti-CD2 monoclonal antibody that inhibits alloimmune responses and monitors T cell activation. *Transplant Proc* 19(1 Pt 1): 277–8 (FA/Blocking)

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