

anti-human CD2 APC-conjugated

APC - conjugated monoclonal antibody HIT11 to human CD2

Cat-No: **21810026**

500 µl

Clone: HIT11

Specificity: The CD2 (HIT11) antibody recognizes a 50-kDa type-I single-chain transmembrane glycoprotein called LFA-2 (lymphocyte function associated antigen-2) or sheep red blood cell (SRBC) receptor. The CD2 antigen is expressed on 70-80% of peripheral blood lymphocytes and 80%-90% of thymocytes and NK cells. The primary ligand for CD2 is CD58 (LFA-3) despite binding to CD48, CD59 and CD15. The CD2 antigen plays a role in T cell signaling and in lymphocyte adhesion, and is an alternative pathway of T cell activation. There are two forms of CD2, a membrane form on cell surface and a soluble form in serum.

Isotype subclass: Mouse IgG1

Form: The purified antibody is conjugated with cross-linked Allophycocyanin (APC) under optimum conditions. The reagent is adjusted for direct use. No reconstitution is necessary.

Physical state: Liquid

Buffer/Additives/Preservative: PBS containing 1% BSA and 0.09% sodium azide (pH 7.2)

Expiration date: The reagent is stable until the expiry date stated on the vial label

Storage conditions: Store at 4 °C. Avoid prolonged exposure to light.

Application: Flow Cytometry

References:

Schlossman S., L. Bloumsell, W. Gilks, et al., eds. 1995.
Leucocyte Typing V: White Cell Differentiation Antigens. P246, Oxford University Press, New York.

Background: CD2 belongs to T lymphocyte glycoproteins of immunoglobulin superfamily. Its interaction with CD58 stabilizes adhesion between T cells and antigen presenting or target cells. Relatively low affinity of CD2 to CD58 (as measured in solution) is compensated within the two-dimensional cell-cell interface to provide tight adhesion. Moreover, T cell activation induces increased CD2 expression and its lateral mobility, making easier contact between CD2 and CD58. Subsequently T cell activation causes fixation of CD58-CD2 at sites of cell-cell contact, thereby strengthening intercellular adhesion. CD2 deficiency reduces intestinal inflammation and helps to control infection.

Warning: Sodium azide is harmful if swallowed (R22). Keep out of reach of children (S2). Keep away from food, drink and animal feeding stuff (S13). Wear suitable protective clothing (S36). If swallowed, seek medical advice immediately and show this container or label (S46). Contact with acids liberates very toxic gas (R32). Azide compounds should be flushed with large volumes of water during disposal to avoid deposits in lead or copper plumbing where explosive conditions can develop.

This material is offered for **research use only**. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

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