

Technical Data Sheet

InVivoMAb anti-human CD2



Attention: Use of this product constitutes an agreement to Bio X Cell's Terms and Conditions which are included with this product in print and can also be found at <https://bioxcell.com/terms-and-conditions>.

Lot Specific Information

Lot Number: Lot Specific*
Volume: Lot Specific*
Concentration: Lot Specific* (generally 4 to 11 mg/ml) *
Total Protein: Lot Specific*

*This information will be noted on the certificate of analysis that ships with this product.

Product Information

Catalog Number: BE0406
Clone: LO-CD2a
Isotype: Rat IgG2b, κ
Recommended Isotype Control(s): InVivoMAb rat IgG2b isotype control, anti-keyhole limpet hemocyanin
Recommended Dilution Buffer: InVivoPure pH 7.0 Dilution Buffer
Immunogen: Purified human T lymphocytes
Reported Applications:
in vivo T cell depletion
in vivo prevention of graft rejection
in vitro inhibition of MLR
Functional assays
Immunohistochemistry (frozen)
ELISA
Formulation: PBS, pH 7.0
Contains no stabilizers or preservatives
Endotoxin: <2EU/mg (<0.002EU/ μ g)
Determined by LAL gel clotting assay
Purity: >95%
Determined by SDS-PAGE
Sterility: 0.2 μ m filtered
Production: Purified from cell culture supernatant in an animal-free facility
Purification: Protein G
RRID:
Molecular Weight: 150 kDa

Description

The LO-CD2a monoclonal antibody reacts with human T-cell surface antigen CD2, also known as SRBC, LFA-2, LFA-3 receptor, rosette receptor, and T-cell surface antigen T11/Leu-5. CD2 is a 45–55 kDa single-pass type I membrane glycoprotein from the immunoglobulin superfamily. CD2 is expressed by 80–90% of human peripheral blood lymphocytes, 95% of thymocytes, E-rosette-forming T cells, a subset of NK cells, and a small proportion (9–12%) of bone marrow cells. CD2 functions as an adhesion receptor that binds to its ligand CD58 (LFA-3), resulting in the activation of CD2-positive T cells and NK cells and in the regulation of their cytolytic activities. CD2 also interacts with CD48, CD2AP, PSTPIP1, and FCGR3A. The LO-CD2a antibody (also called BTI-322) was developed as an immunosuppressive agent for use in experiments involving allotransplantation of organs to prevent graft rejection. The LO-CD2a antibody has been shown to induce CD2+ T-cell depletion through NK cell-mediated ADCC and strongly inhibit *in vitro* mixed lymphocyte reaction (MLR) in mixed lymphocyte culture (MLC). Further, in a range of *in vitro* experiments, the LO-CD2a monoclonal antibody inhibited soluble OKT-3, stimulated proliferation of PBMCs, and demonstrated immunosuppressive activities in functional assays. Several *in vivo* studies have documented the effective CD2+ T cell depletion and graft rejection prevention efficacy of the LO-

CD2a antibody.

Storage

Store at the stock concentration at 4°C. **Do not freeze.**

It is not uncommon for a floccule or precipitate to appear during storage. The floccule is typically buffer salts precipitating out of solution or a small bit of protein aggregation. For information on how to remove floccules or precipitates see our FAQ's at <https://bioxcell.com/faqs>.

Protocol Information

Since applications vary, each investigator should use the application references as a guide to help estimate the appropriate dose or concentration. The dose or concentration can be further optimized experimentally in a dose response or titration experiment.

Application References

For a complete list of references, visit https://bioxcell.com/catalogsearch/result/?q=BE0406#tab_references or scan the QR code below.



Bio X Cell, LLC

<https://bioxcell.com>

+1-866-787-3444

customerservice@bioxcell.com

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