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:	≤1EU/mg (≤0.001EU/μg) Determined by LAL gel clotting assay
Purity:	≥95% Determined by SDS-PAGE
Sterility:	0.2 μm 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/be0406?bxcs=9k1b3a#tab_references or scan the QR code below.

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