Technical Data Sheet

InVivoMAb anti-mouse Dendritic Cell Marker (33D1)

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:	**BE0426**
Clone:	**33D1**
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:	Mouse spleen and lymph node dendritic cells in complete Freund's adjuvant
Reported Applications:	*in vivo* depletion of 33D1+ dendritic cell *in vitro* depletion of 33D1+ dendritic cell *in vitro* Binding assay Flow cytometry Immunofluorescence Immunohistochemistry
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 filtration
Production:	Purified from cell culture supernatant in an animal-free facility
Purification:	Protein G
Molecular Weight:	150 kDa

Description

The 33D1 monoclonal antibody is used as a marker of murine splenic Dendritic Cells (DCs). The protein recognized by this antibody i.e. clone 33D1 is a 236 AA long protein with a predicted molecular weight of 27.3 kDa. In post-translational modifications, this protein shows disulfide bond formation which may result in the appearance of dimers in an immunoblot assay. The 33D1 antigen is also known as Dendritic cell inhibitory receptor 2 (DCIR2) or C-type lectin domain family 4, member a4 (Clec4a4). This antigen is expressed in a variety of dendritic cell sub-populations from mouse thymus, spleen, lymph node, and Peyser's patch. Recent studies have shown that DCIR2 is mainly expressed by conventional type 2 dendritic cells (cDC2), and that it is involved in the process of antigen recognition, suppression of autoimmunity through down-regulation of T cell priming, the modulation of T cell response and in the progression of diet-induced obesity and inflammation. It is also reported that DCIR2 rich DCs ameliorate diseases with a strong immune inflammatory component, e.g. experimental autoimmune encephalomyelitis (EAE), experimental melanoma, and diabetes. The 33D1 monoclonal antibody has been extensively used for in vitro and in vivo depletion of 33D1+ dendritic cell in experimental studies involving mouse models.

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/be0426?bxcs=9k1b3a#tab_references or scan the QR code below.

Bio X Cell, LLC
https://bioxcell.com
+1-866-787-3444
customerservice@bioxcell.com

Conditions: For research use only. Not for use in diagnostic or therapeutic procedures.
Not for resale.
Bio X Cell, Bio X Cell logo, and all other trademarks are the property of Bio X Cell, LLC © 2025 Bio X Cell, LLC