

Datasheet: MCA2257B

Description:	MOUSE ANTI HUMAN CD226:Biotin
Specificity:	CD226
Other names:	DNAM-1
Format:	Biotin
Product Type:	Monoclonal Antibody
Clone:	DX11
Isotype:	IgG1
Quantity:	0.1 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat - 1/10
Immunoprecipitation	▪			

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species	Human
Product Form	Purified IgG conjugated to biotin - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative	0.09% sodium azide (NaN ₃)
Stabilisers	1% bovine serum albumin
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
Immunogen	Human cytotoxic T lymphocyte clone

**External Database
Links**

UniProt:

[Q15762](#) [Related reagents](#)

Entrez Gene:

[10666](#) CD226 [Related reagents](#)

Synonyms

DNAM1

RRID

AB_324795

Fusion Partners

Spleen cells from immunized BALB/c mouse were fused with cells of the Sp2/0 myeloma cell line

Specificity

Mouse anti Human CD226 antibody, clone DX11 recognizes human CD226, a ~65 kDa glycoprotein, also known as DNAM1 (DNAX accessory molecule-1). CD226 is broadly expressed on T-cells, NK cells, platelets, monocytes and a subset of B cells. CD226 is also expressed by a subset of CD3 positive thymocytes.

Mouse anti Human CD226 antibody, clone DX11 is reported to inhibit T- and NK cell mediated cytotoxicity against tumor cell targets and to block TNF alpha and IFN gamma secretion by alloantigen-specific T-cells ([Kojima *et al.* 2003](#)).

Flow Cytometry

Use 10µl of the suggested working dilution to label 1 x 10⁶ cells in 100µl

References

1. Shibuya, A. *et al.* (1996) DNAM-1, a novel adhesion molecule involved in the cytolytic function of T lymphocytes. [Immunity. 4 \(6\): 573-81.](#)
2. Shibuya, A. *et al.* (1998) Protein kinase C is involved in the regulation of both signaling and adhesion mediated by DNAX accessory molecule-1 receptor. [J Immunol. 161 \(4\): 1671-6.](#)
3. Kojima, H. *et al.* (2003) CD226 mediates platelet and megakaryocytic cell adhesion to vascular endothelial cells. [J Biol Chem. 278 \(38\): 36748-53.](#)
4. Manes, T.D. and Pober, J.S. (2011) Identification of Endothelial Cell Junctional Proteins and Lymphocyte Receptors Involved in Transendothelial Migration of Human Effector Memory CD4+ T Cells. [J Immunol. 186: 1763-8.](#)
5. Ardolino, M. *et al.* (2011) DNAM-1 ligand expression on Ag-stimulated T lymphocytes is mediated by ROS-dependent activation of DNA-damage response: relevance for NK-T cell interaction. [Blood. 117: 4778-86.](#)
6. Soriani, A. *et al.* (2009) ATM-ATR-dependent up-regulation of DNAM-1 and NKG2D ligands on multiple myeloma cells by therapeutic agents results in enhanced NK-cell susceptibility and is associated with a senescent phenotype. [Blood. 113: 3503-11.](#)
7. Fionda, C. *et al.* (2009) Heat shock protein-90 inhibitors increase MHC class I-related chain A and B ligand expression on multiple myeloma cells and their ability to trigger NK cell degranulation. [J Immunol. 183 \(7\): 4385-94.](#)
8. Matusali, G. *et al.* (2012) The Human Immunodeficiency Virus Type 1 Nef and Vpu Proteins Downregulate the Natural Killer Cell-Activating Ligand PVR. [J Virol. 86: 4496-504.](#)
9. Fionda, C. *et al.* (2015) Nitric oxide donors increase PVR/CD155 DNAM-1 ligand

expression in multiple myeloma cells: role of DNA damage response activation. [BMC Cancer. 15 \(1\): 17.](#)

10. Molfetta, R. *et al.* (2019) The Ubiquitin-proteasome pathway regulates Nectin2/CD112 expression and impairs NK cell recognition and killing. [Eur J Immunol. 49 \(6\): 873-83.](#)

11. Vulpis, E. *et al.* (2022) Impact on NK cell functions of acute versus chronic exposure to extracellular vesicle-associated MICA: Dual role in cancer immunosurveillance. [J Extracell Vesicles. 11 \(1\): e12176.](#)

12. Molfetta, R. *et al.* (2020) CD155: A Multi-Functional Molecule in Tumor Progression. [Int J Mol Sci. 21 \(3\): 922.](#)

13. Zitti, B. *et al.* (2017) Innate immune activating ligand SUMOylation affects tumor cell recognition by NK cells. [Sci Rep. 7 \(1\): 10445.](#)

14. Mekhloufi, A. *et al.* (2020) Bone Marrow Stromal Cell-Derived IL-8 Upregulates PVR Expression on Multiple Myeloma Cells via NF-κB Transcription Factor. [Cancers \(Basel\). 12 \(2\): 440.](#)

Storage

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee

12 months from date of despatch

Health And Safety Information

Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2257B>
10041

Regulatory

For research purposes only

Related Products

Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Email: antibody_sales_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: antibody_sales_uk@bio-rad.com

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

'M413616:221123'

Printed on 24 Apr 2025

© 2025 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)