Datasheet: MCA2257PE

Description:	MOUSE ANTI HUMAN CD226:RPE
Specificity:	CD226
Other names:	DNAM-1
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	DX11
Isotype:	IgG1
Quantity:	100 TESTS

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

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 R. Phycoerythrin (RPE) - lyophilized

Reconstitution

Reconstitute with 1.0 ml distilled water

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
RPE 488nm laser	496	578

Preparation

Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% sodium azide (NaN_3)
1% bovine serum albumin
5% sucrose

Immunogen	Human cytotoxic T lymphocyte clone
External Database Links	**UniProt:** Q15762 Related reagents **Entrez Gene:** 10666 CD226 Related reagents
Synonyms	DNAM1
RRID	AB_566655
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 10^6 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:

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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.
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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-kB Transcription Factor. Cancers (Basel). 12 (2): 440.

Storage	Store at +4°C. DO NOT FREEZE This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #20487 available at: https://www.bio-rad-antibodies.com/SDS/MCA2257PE 20487
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:RPE (MCA928PE)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A)
HUMAN SEROBLOCK (BUF070B)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M419488:230616'

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