

Datasheet: MCA2257B

### **BATCH NUMBER 1610**

Description:	MOUSE ANTI HUMAN CD226:Biotin	
Specificity:	CD226	
Other names:	DNAM-1	
Format:	Biotin	
Product Type:	Monoclonal Antibody	
Clone:	DX11	
Isotype:	lgG1	
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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

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

Where this antibody 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 antibody 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 supernatant	from tissue culture
Buffer Solution	Phosphate buffered saline	
Preservative Stabilisers	0.09% Sodium Azide 1.0% Bovine Serum Albumin	
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml	

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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 10ul of the suggested working dilution to label 1 x 10<sup>6</sup> cells in 100ul.

#### 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. <u>J Immunol. 161 (4):</u> 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. <u>Blood</u>. 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. Matusali, G. *et al.* (2012) The Human Immunodeficiency Virus Type 1 Nef and Vpu Proteins Downregulate the Natural Killer Cell-Activating Ligand PVR. <u>J Virol. 86:</u> 4496-504.
- 8. 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.

9. 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.

Storage Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

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

Worldwide

Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Europe

Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50

Email: antibody\_sales\_us@bio-rad.com

Email: antibody\_sales\_uk@bio-rad.com

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 'M366461:200529'

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