

Datasheet: MCA2257EL

Description:	MOUSE ANTI HUMAN CD226:Low Endotoxin		
Specificity:	CD226		
Other names:	DNAM-1		
Format:	Low Endotoxin		
Product Type:	Monoclonal Antibody		
Clone:	DX11		
Isotype:	lgG1		
Quantity:	0.5 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	-			1/50 - 1/200
Immunohistology - Frozen				
Immunohistology - Paraffin				
ELISA				
Immunoprecipitation	•			
Western Blotting				
Functional Assays				

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 - liquid	
Preparation	Purified IgG prepared by affinity chromatography on Protein A supernatant	A from tissue culture
Buffer Solution	Phosphate buffered saline	
Preservative Stabilisers	None present	

Odifier Free	res	
Endotoxin Level	< 0.01 EU/µg	
Approx. Protein Concentrations	IgG concentration 1.0 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_324935	
Fusion Partners	Spleen cells from immunized BALB/c mouse were fused with cells of the Sp2/0 myelor cell line	na
Specificity	Mouse anti Human CD226 antibody, clone DX11 recognizes human CD226, a ~65 k 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 gamm 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	 Shibuya, A. <i>et al.</i> (1996) DNAM-1, a novel adhesion molecule involved in the cytolyt function of T lymphocytes. Immunity. 4 (6): 573-81. Shibuya, A. <i>et al.</i> (1998) Protein kinase C is involved in the regulation of both signal and adhesion mediated by DNAX accessory molecule-1 receptor. J Immunol. 161 (4): 1671-6. Kojima, H. <i>et al.</i> (2003) CD226 mediates platelet and megakaryocytic cell adhesion vascular endothelial cells. J Biol Chem. 278 (38): 36748-53. Manes, T.D. and Pober, J.S. (2011) Identification of Endothelial Cell Junctional Protein and Lymphocyte Receptors Involved in Transendothelial Migration of Human Effector Memory CD4+ T Cells. J Immunol. 186: 1763-8. Ardolino, M. <i>et al.</i> (2011) DNAM-1 ligand expression on Ag-stimulated T lymphocyte mediated by ROS-dependent activation of DNA-damage response: relevance for NK-T interaction. Blood. 117: 4778-86. Soriani, A. <i>et al.</i> (2009) ATM-ATR-dependent up-regulation of DNAM-1 and NKG2D ligands on multiple myeloma cells by therapeutic agents results in enhanced NK-cell 	ing to eins

Carrier Free

Yes

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

Storage

Store at -20°C only.

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 #10162 available at: https://www.bio-rad-antibodies.com/SDS/MCA2257EL 10162
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...) **RPE** Goat Anti Mouse IgG IgA IgM (STAR87...) HRP Goat Anti Mouse IgG (STAR76...) **RPE** Goat Anti Mouse IgG (STAR70...) **FITC** Rabbit Anti Mouse IgG (STAR13...) **HRP** Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP Rabbit Anti Mouse IgG (STAR9...) **FITC**

Goat Anti Mouse IgG (STAR77...) HRP

Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®550,

DyLight®650, DyLight®680, DyLight®800,

FITC, HRP

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:Low Endotoxin (MCA928EL)

 North & South
 Tel: +1 800 265 7376
 Worldwide
 Tel: +44 (0)1865 852 700
 Europe
 Tel: +49 (0) 89 8090 95 21

 America
 Fax: +1 919 878 3751
 Fax: +44 (0)1865 852 739
 Fax: +49 (0) 89 8090 95 50

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M413611:221123'

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