

Datasheet: MCA2298EL

Description:	HAMSTER ANTI MOUSE CD29:Low Endotoxin
Specificity:	CD29
Other names:	INTEGRIN BETA 1 CHAIN
Format:	Low Endotoxin
Product Type:	Monoclonal Antibody
Clone:	HM beta 1-1
Isotype:	IgG
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 - 1/100
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	
Functional Assays	▪			

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	Mouse
Species Cross Reactivity	Reacts with: Rat N.B. Antibody reactivity and working conditions may vary between species.
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	None present
Carrier Free	Yes
Endotoxin Level	<0.01 EU/mg

Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Purified mouse VLA-4 antigen.
External Database Links	<p>UniProt: P09055 Related reagents</p> <p>Entrez Gene: 16412 Itgb1 Related reagents</p>
Fusion Partners	Spleen cells from immunized Armenian hamsters were fused with cells of the P3U1 mouse myeloma cell line.
Specificity	<p>Hamster anti Mouse CD29 antibody, clone HM beta 1-1 recognizes the murine integrin beta 1 subunit (CD29), a ~110 kDa cell surface glycoprotein that is widely expressed by a variety of cells including all leucocytes. CD29 forms non-covalent bonds with the integrin alpha subunits, including CD51 and CD49a-f, to form heterodimers. The ligands for these heterodimers include collagen, fibronectin, laminin and vascular adhesion molecule-1. In the immune system beta 1 integrins play an important role in cell adhesion, migration, activation and differentiation.</p> <p>Hamster anti Mouse CD29 antibody, clone HM beta 1-1 is reported to inhibit beta 1 integrin mediated adhesion (Noto <i>et al.</i> 1995).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> 1. Noto, K. <i>et al.</i> (1995) Identification and functional characterization of mouse CD29 with a mAb. Int Immunol. 7 (5): 835-42. 2. Lu, T.Y. <i>et al.</i> (2010) Epithelial cell adhesion molecule regulation is associated with the maintenance of the undifferentiated phenotype of human embryonic stem cells. J Biol Chem. 285: 8719-32. 3. Li S <i>et al.</i> (2010) Upregulation of CXCR4 favoring neural-like cells migration via AKT activation. Neurosci Res. 67 (4): 293-9. 4. Eto, D.S. <i>et al.</i> (2007) Integrin-mediated host cell invasion by type 1-piliated uropathogenic Escherichia coli. PLoS Pathog. 3: e100. 5. Tiede, B.J. <i>et al.</i> (2009) A novel mouse model for non-invasive single marker tracking of mammary stem cells in vivo reveals stem cell dynamics throughout pregnancy. PLoS One. 4 (11): e8035. 6. Kouros-Mehr H (2008) GATA-3 links tumor differentiation and dissemination in a luminal breast cancer model. Cancer Cell. 13: 141-52. 7. Xu, L. <i>et al.</i> (2017) Umbilical cord-derived mesenchymal stem cells on scaffolds facilitate collagen degradation via upregulation of MMP-9 in rat uterine scars. Stem Cell Res Ther. 8 (1): 84.
Storage	<p>Store at -20°C only.</p> <p>This product should be stored undiluted.</p> <p>Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody.</p>
Shelf Life	18 months from date of despatch.

Health And Safety Information Material Safety Datasheet documentation #10162 available at:
10162: <https://www.bio-rad-antibodies.com/uploads/MSDS/10162.pdf>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Hamster IgG (STAR104...) [DyLight®549](#), [DyLight®649](#), [DyLight®800](#),
[FITC](#)

Goat Anti Hamster IgG (STAR79...) [Biotin](#), [FITC](#), [HRP](#)

Recommended Negative Controls

[HAMSTER \(ARMENIAN\) IgG NEGATIVE CONTROL \(MCA2356\)](#)

Recommended Positive Controls

[HAMSTER \(ARMENIAN\) IgG NEGATIVE CONTROL:Low Endotoxin \(MCA2356EL\)](#)

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