Datasheet: MCA1270PE

BATCH NUMBER INN0515

Description:	MOUSE ANTI HUMAN CD13:RPE
Specificity:	CD13
Other names:	AMINOPEPTIDASE N
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	WM15
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 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

Species Cross Reactivity

Reacts with: Rhesus Monkey

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized

Reconstitution

Reconstitute with 1 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

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide 1% Bovine Serum Albumin 5% Sucrose
Immunogen	Human AML cells.
External Database Links	**UniProt:** P15144 Related reagents **Entrez Gene:** 290 ANPEP Related reagents
Synonyms	APN, CD13, PEPN
RRID	AB_321311
Fusion Partners	Spleen cells from immunised BALB/c mice where fused with cells of the mouse NS1 myeloma cell line.
Specificity	**Mouse anti Human CD13 antibody, clone WM15** recognizes human CD13 also known as aminopeptidase N. CD13 is a single pass type II glycosylated integral membrane protein with a predicted molecular mass of ~110 kDa and an apparent molecular mass of ~150 kDa expressed by granulocytes, monocytes, fibroblasts, endothelial cells and by myeloid leukaemia cells (Bradstock *et al.* 1985). CD13 acts as a major cell surface receptor for group 1 coronoviruses (Breslin *et al.* 2003) which bind to a critical sequence encompassing amino acid residies 288-295 (Kolb *et al.* 1997). CD13 functions as an aminopeptidase enzyme, a metalloprotease present as both a membrane bound form and also a soluble aminopeptidase N. Mouse anti Human CD13, clone WM15 inhibits infection of cells by human coronavirus (Lachance *et al.* 1998) but not hepatitis C virus (Koutsoudakis *et al.* 2006) and inhibits aminopeptidase N activity of the CD13 molecule (Asmun *et al.* 1992).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 cells or 100ul whole blood
References	1. Bradstock, K.F. *et al.* (1985) Human myeloid differentiation antigens identified by monoclonal antibodies: expression on leukemic cells. Pathology. 17 (3): 392-9. 2. Bradstock, K.F. *et al.* (1985) Myeloid progenitor surface antigen identified by monoclonal antibody. Br J Haematol. 61 (1): 11-20. 3. Favaloro, E.J. *et al.* (1988) Further characterization of human myeloid antigens (gp160,95; gp150; gp67): investigation of epitopic heterogeneity and non-haemopoietic distribution using panels of monoclonal antibodies belonging to CD-11b, CD-13 and CD-33. Br J Haematol. 69 (2): 163-71. 4. Favaloro, E.J. (1991) CD-13 (gp150; aminopeptidase-N): co-expression on endothelial

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16. Fiddler, C.A. *et al.* (2016) The Aminopeptidase CD13 Induces Homotypic Aggregation in Neutrophils and Impairs Collagen Invasion. PLoS One. 11 (7): e0160108.
17. Chaturvedi, C.P. *et al.* (2018) Altered Expression of Hematopoiesis Regulatory Molecules in Lipopolysaccharide-Induced Bone Marrow Mesenchymal Stem Cells of Patients with Aplastic Anemia. Stem Cells Int. 2018: 6901761.

Storage	Prior to reconstitution store at +4°C. Following reconstitution 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/MCA1270PE

	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

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