

**CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET**

<b>Product name</b>	CD13, Mouse, clone ER-BMDM1		
<b>Catalog number</b>	HM1083-100UG		
<b>Lot number</b>	-	<b>Expiry date</b>	-
<b>Volume</b>	100 µg	<b>Amount</b>	100 µg
<b>Formulation</b>	0.2 µm filtered in PBS+0.1%BSA+0.02%NaN3	<b>Concentration</b>	100 µg/ml
<b>Host Species</b>	Rat IgG2a	<b>Conjugate</b>	None
<b>Endotoxin</b>	N.A.	<b>Purification</b>	Protein G
<b>Storage</b>	4°C		

**Application notes**

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #								
Yes	•	•		•				
No								
N.D.			•		•	•	•	•

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

**General Information**

<b>Description</b>	The monoclonal antibody ER-BMDM1 is directed against a 160-kDa cell membrane-associated antigen with aminopeptidase N activity. Aminopeptidase N (APN) is also known as Alanyl Aminopeptidase (ANPEP), CD13 antigen or membrane protein p161. The protein consists of a short cytoplasmic tail, a transmembrane region, a Ser/Thr region, and a zinc metalloproteinase domain. Widely expressed in many cells, tissues, and species, aminopeptidase N cleaves the N-terminal amino acids from bioactive peptides, leading to their inactivation or degradation. It has putative involvement in several biological processes including antigen processing and presentation, cell adhesion, tumor invasion and metastasis and neurotransmitter degradation. The antigen recognized by the monoclonal antibody ER-BMDM1 is present on various mouse macrophage and dendritic cell subpopulations as well as on microvillous epithelia. The ER-BMDM1 antigen is expressed at increasing levels upon maturation of macrophages. Therefore the monoclonal antibody ER-BMDM1 is a useful marker for the identification of aminopeptidase N positive macrophages and dendritic cells in mouse, the expression of the ER-BMDM1 antigen arises after the monocytic stage of differentiation: bone marrow cells and peripheral blood monocytes are ER-BMDM1 negative, whereas mature macrophages express the ER-BMDM1 antigen. A subpopulation of dendrocytes and their in vitro equivalents, the dendritic cells, are also ER-BMDM1 positive.
<b>References</b>	<ol style="list-style-type: none"> <li>1. Leenen, P et al; The monoclonal antibody ER-BMDM1 recognizes a macrophage and dendritic cell differentiation antigen with aminopeptidase activity. Eur J Immunol 1992, 22:1567</li> <li>2. Allaerts, W et al; A population of interstitial cells in the anterior pituitary with a hematopoietic origin and a rapid turnover: a relationship with folliculo-stellate cells? J Neuroimmunol 1997, 78: 184</li> <li>3. Leenen, P et al; Heterogeneity of mouse spleen dendritic cells: in vivo phagocytic activity, expression of macrophage markers, and subpopulation turnover. J Immunol 1998, 160: 2166</li> </ol>
<b>Storage&amp;stability</b>	Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.

**Precautions**

For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

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We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC  
Brenda Teunissen

Date  
12/11/2019

Do you have any questions or comments regarding this product? Please contact us via [support@hycultbiotech.com](mailto:support@hycultbiotech.com).