

## **CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET**

Product name	Endomucin, Mouse, clone V.7C7.1				
Catalog number	HM1108-20UG				
Lot number	-	Expiry date	-		
Volume	200 µl	Amount	20 µg		
Formulation	0.2 $\mu m$ filtered in PBS+0.1%BSA+0.02%NaN3	Concentration	100 μg/ml		
Host Species	Rat IgG2a	Conjugate	None		
Endotoxin	N.A.	Purification	Protein G		
Storage	4°C				

## **Application notes**

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #		2		1			1,2	1,2
Yes	•	•	•	•		•	•	•
No					•			

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



IF: Immuno fluorescence staining of bEND3 cells with HM1108 in a concentration of 1 µg/ml.

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.

- FC: Two-stage labeling of cell surface molecules was performed by incubation of cells (1x10<sup>6</sup>) with the appropriate MoAb supernatant, followed after washing by the addition of purified fluorescein isothiocyanate (FITC)-conjugated goat anti-rat Ig antibody (Ref.1).
- IA: HM1108 can be used as detection antibody.

## **General Information**

Description	The monoclonal antibody V.7C7.1 recognizes endomucin, type I membrane protein of 248 amino a shows no signicant homology to any known glycoprotein. As a typical mucin-like glycoprotein, end content of serine and threonine residues, suggesting strong O-glycosylation; the sensitivity to a endopeptidase indicates that endomucin is also a sialomucin. Endomucin is an endothelial-specific constitutively expressed endothelial cell surface protein that is found on all venules but is absent from venule cells (HEV) of peripheral and mesenteric lymph nodes as well as Peyer's patches, the specific efficient lymphocyte trafficking. This could indicate an anti-adhesive function of endomucin, as dem sialomucins. Mucosal addressin cell adhesion molecule 1 (MAdCAM-1) is another cell adhesion mol a mucin-like domain and is expressed on HEV in Peyer's patches, mesenteric lymph nodes and on a lamina propria. In the HEV of mesenteric lymph nodes, the mucin-like domain of a subpopulate molecules contains sulfated carbohydrate side chains that interact with L-selectin. The presence protein kinase C phosphorylation sites in the cytoplasmic tail of endomucin indicates that endomuci to be a signaling molecule.	pral antibody V.7C7.1 recognizes endomucin, type I membrane protein of 248 amino acids (75 kDa) and gnicant homology to any known glycoprotein. As a typical mucin-like glycoprotein, endomucin has a high erine and threonine residues, suggesting strong O-glycosylation; the sensitivity to O-sialoglycoprotein se indicates that endomucin is also a sialomucin. Endomucin is an endothelial-specific sialomucin. It is a <i>v</i> expressed endothelial cell surface protein that is found on all venules but is absent from high endothelial (HEV) of peripheral and mesenteric lymph nodes as well as Peyer's patches, the specialized site for most ohocyte trafficking. This could indicate an anti-adhesive function of endomucin, as demonstrated for other Mucosal addressin cell adhesion molecule 1 (MAdCAM-1) is another cell adhesion molecule that contains domain and is expressed on HEV in Peyer's patches, mesenteric lymph nodes and on venules in intestinal ria. In the HEV of mesenteric lymph nodes, the mucin-like domain of a subpopulation of MAdCAM-1 ontains sulfated carbohydrate side chains that interact with L-selectin. The presence of three putative se C phosphorylation sites in the cytoplasmic tail of endomucin indicates that endomucin has the capacity aling molecule.	
Immunogen	Mouse endomucin-IgG fusion protein		
Aliases	Endomucin-2, mucin-14, gastric cancer antigen Ga34		
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Cross reactivity	Hun	Human: No				
Gene	Ger	ne name: Emcn	Entrez Gene ID 59308	Uniprot Q9R0H2		
References	1. 2.	Morgan, S et al; Biochemical characterization and molecular cloning of a novel endothelial-specific sialomucin. Blood 1999, <i>93</i> : 165 Kuhn, A et al; Expression of endomucin, a novel endothelial sialomucin, in normal and diseased skin. J Invest Dermatol. 2002, <i>119</i> : 1388				
Storage&stability	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.					

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 13/07/2021

Do you have any questions or comments regarding this product? Please contact us via <a href="mailto:support@hycultbiotech.com">support@hycultbiotech.com</a>.

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