

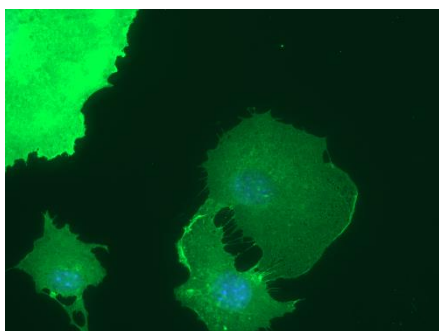
**CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET**

<b>Product name</b>	Endomucin, Mouse, clone V.7C7.1		
<b>Catalog number</b>	HM1108-20UG		
<b>Lot number</b>	-	<b>Expiry date</b>	-
<b>Volume</b>	200 µl	<b>Amount</b>	20 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 #		2		1			1,2	1,2
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



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 ( $1 \times 10^6$ ) 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 acids (75 kDa) and shows no significant homology to any known glycoprotein. As a typical mucin-like glycoprotein, endomucin has a high content of serine and threonine residues, suggesting strong O-glycosylation; the sensitivity to O-sialoglycoprotein endopeptidase indicates that endomucin is also a sialomucin. Endomucin is an endothelial-specific sialomucin. It is a constitutively expressed endothelial cell surface protein that is found on all venules but is absent from high endothelial venule cells (HEV) of peripheral and mesenteric lymph nodes as well as Peyer's patches, the specialized site for most efficient lymphocyte trafficking. This could indicate an anti-adhesive function of endomucin, as demonstrated for other sialomucins. Mucosal addressin cell adhesion molecule 1 (MAdCAM-1) is another cell adhesion molecule that contains a mucin-like domain and is expressed on HEV in Peyer's patches, mesenteric lymph nodes and on venules in intestinal lamina propria. In the HEV of mesenteric lymph nodes, the mucin-like domain of a subpopulation of MAdCAM-1 molecules contains sulfated carbohydrate side chains that interact with L-selectin. The presence of three putative protein kinase C phosphorylation sites in the cytoplasmic tail of endomucin indicates that endomucin has the capacity to be a signaling molecule.

**Immunogen** Mouse endomucin-IgG fusion protein

**Aliases** Endomucin-2, mucin-14, gastric cancer antigen Ga34

