CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	EMAPII, Mouse, clone M7/1		
Catalog number	HM1124-100UG		
Lot number	-	**Expiry date**	-
Volume	1 ml	**Amount**	100 µg
Formulation	0.2 µm filtered in PBS+0.1%BSA	**Concentration**	100 µg/ml
Host Species	Rat IgG2a	**Conjugate**	None
Endotoxin	<24 EU/mg	**Purification**	Protein G
Storage	4°C		

Application notes

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #					1,2	1		1
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

Description

Monoclonal antibody clone M7/1 recognizes human endothelial-monocyte-activating polypeptide II (EMAP II). EMAPII is a proinflammatory cytokine and chemoattractant of macrophages and polymorphonuclear lymphocytes. The protein was initially identified as a product of murine methylcholanthrene A-induced fibrosarcoma cells. EMAP II is synthesized as a 34 kDa precursor molecule (proEMAP), it can run anomalously in SDSpage at 43 kDa, and is enzymatically cleaved to produce a biologically active 22 kDa mature polypeptide. It modulates a range of properties of endothelial cells, monocytes, and neutrophils in vitro, and induces an acute inflammatory reaction and tumor regression in vivo. Later it was found to be anti-angiogenic and capable of induction of apoptosis in proliferation and hypoxic endothelial cells in vitro in tumor vasculature in vivo. EMAP II is released from cells, by a yet unknown mechanism, as pro- and mature EMAP II proteins in response to various forms of cellular stresses, including glucose starvation and hypoxia. Endothelial cells are the main target for EMAPII and explain the anti-angiogenic property. The anti-tumor effect is expected to a large extent to be mediated through this characteristic. EMAPII is also associated with brain diseases and injury. EMAPII expression is related with leukocytes-infiltrated inflamed tissue and subsequent apoptosis. In solid tumors there is also an immunosuppressive role identified. EMAPII inducing tumor cells induce apoptosis of lymphocytes. EMPAII is considered a marker for microglial cells and macrophages in brain diseases. The distribution of EMAPII and its precursor in biopsies might be applicable as additive diagnostic tool.

Immunogen

Recombinant full-length mouse EMAP II

Aliases

Endothelial cell and monocyte activating proinflammatory cytokine

References

1. Rajashekhar, G et al; A monoclonal rat anti-mouse EMAP II antibody that functionally neutralizes pro- and mature-EMAP II in vitro. J Immunol Methods 2009, *350*: 22.
2. Clauss, M et al; Lung endothelial monocyte-activating protein 2 is a mediator of cigarette smoke-induced emphysema in mice. J Clin Invest 2011, *121*: 2470.

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	Date
Brenda Teunissen	12/11/2019

Do you have any questions or comments regarding this product? Please contact us via support@hycultbiotech.com.