CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	EMAP II, Human, clone 546-2		
Catalog number	HM2185-20UG		
Lot number	-	**Expiry date**	-
Volume	200 µl	**Amount**	20 µg
Formulation	0.2 µm filtered in PBS+0.1%BSA+0.02%NaN3	**Concentration**	100 µg/ml
Host Species	Mouse IgG2b	**Conjugate**	None
Endotoxin	N.A.	**Purification**	Protein G
Storage	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 1:10.

- IA: Monoclonal antibody 546-2 can be used as detector in immuno assays.

General Information

Description

Monoclonal antibody 546-2 reacts with endothelial-monocyte-activating polypeptide II (EMAP II), a 20 kDa polypeptide. EMAP II is an antiangiogenic and proinflammatory cytokine (expressed by microglia/macrophages). EMAP II appears to be a profound modulator of inflammatory reactions of the innate immune system and might participate in a variety of pathogenic immune-processes in the mammalian brain. EMAP II is a potential mediator of inflammatory responses in autoimmunity and a considered target to stage reactions of monocytic lineage cells in inflammatory reactions. In normal tissues EMAP II is expressed in endocrine organs, in cells of neuroendocrine origin, but also in tissues with high cell turnover. Under pathophysiological conditions EMAP II has several functions. It triggers the recruitment of macrophages by elevating cytosolic-free Ca2+ concentrations, it stimulates leukocyte chemotaxis, it induces the expression of TNF-alpha and tissue factor (TF) by monocytes and myeloperoxidase (MPO) by polymorphonuclear cells (PNMs). Furthermore it stimulates the release of von Willebrand-factor, P- and E-selectin by endothelial cells and EMAP II induces endothelial programmed cell death in vitro. The monoclonal antibody 546-2 is cross reactive with rat endothelial-monocyte-activating polypeptide II (rat EMAP II).

Aliases

Endothelial Monocyte Activating Polypeptide II

Cross reactivity

Rat: Yes.

References

1. Mueller, C et al; Accumulation of the proinflammatory cytokine endothelial-monocyte-activating polypeptide II in ramified microglial cells in brains of Borna virus infected Lewis rats. Neurosci Lett 2003, *339*: 215
2. Mueller, C et al; Lesional expression of a proinflammatory and antiangiogenic cytokine EMAP II confined to endothelium and microglia/macrophages during secondary damage following experimental traumatic brain injury. J Neuroimmunol 2003, *135*: 1
3. Mueller, C et al; Spinal cord injury induces lesional expression of the proinflammatory and antiangiogenic cytokine EMAP II. J Neurotrauma 2003, *20*: 1007
4. Schluesener, H et al; Localization of endothelial-monocyte-activating polypeptide II (EMAP II), a novel proinflammatory cytokine, to lesions of experimental autoimmune encephalomyelitis, neuritis, and uveitis: expression by monocytes and activated microglial cells. Glia 1997, *20*: 365

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	02/12/2020

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