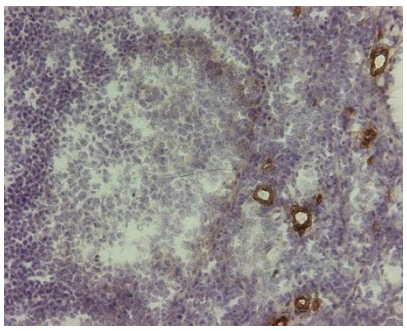
CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	VAP-1, Human, clone 174-5		
Catalog number	HM2213-20UG		
Lot number	-	**Expiry date**	-
Volume	200 µl	**Amount**	20 µg
Formulation	0.2 µm filtered in PBS+0.1%BSA	**Concentration**	100 µg/ml
Host Species	Mouse IgG1	**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		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



IHC-F: Immunohistochemical analysis of VAP-1 on human tonsil tissue. Staining of frozen tissue section with antibody 174-5 (Cat. # HM2213). Anti-human VAP-1 staining results in vessels that are VAP-1 positive, whereas morphologically similar vessels next to positive ones can be negative.

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: Antibody 174-5 stains Ax cells stably transfected with VAP-1 cDNA. As negative control mock transfected cells were used.(Ref.1)
- IHC-F: Tissue sections were fixed in acetone before staining with 174-5. .As positive control anti-VAP-1 mAb 2D10 was used and as negative control an isotype matched irrelevant mAb. (Ref.1).
- FS: Antibody 174-5 inhibits lymphocyte infiltration in liver allograft rejection. The antibody was administered intravenously at a concentration of 2 mg/kg. A irrelevant isotype-matched antibody served as a negative control. (Ref.1).
- Positive control: Ax cells stably transfected with VAP-1 cDNA. (Ref. 1); Negative control: Mock transfected Ax cells. (Ref. 1).

General Information

Description

The monoclonal antibody 174-5 recognizes human Vascular Adhesion Protein-1 (VAP-1), which is a glycosylated homodimeric membrane protein consisting of two 90 kDa subunits connected by disulfide bonds. It contains a short N-terminal cytoplasmic tail, a single membrane-spanning domain and a large extracellular part. A soluble form of VAP-1 (sVAP-1) has been described, which presumably results from the proteolytic cleavage of membrane-bound VAP-1. Structurally VAP-1 belongs to enzymes called semicarbamizide-sensitive amine oxidases, which contain copper as a cofactor. These enzymes deaminate primary amines in a reaction producing hydrogen peroxide, aldehyde, and ammonia. VAP-1 is present in endothelial cells, smooth muscle cells, adipocytes, and in follicular dendritic cells. In endothelial cells the majority of VAP-1 is stored within intracellular granules and translocated to the surface upon inflammation where it regulates leukocyte tissue infiltration. Furthermore, the end-products formed by VAP-1 can also regulate leukocyte migration by signaling effects, have insulin-like effects in energy metabolism, and can cause

vascular damage by direct cytotoxicity. Elevated sVAP-1serum levels have been described in several inflammatory diseases as well as colorectal cancer. Moreover, diminished insulin secretion appears to increase the concentration of soluble VAP-1 in plasma. Therefore, VAP-1 might be an interesting diagnostic marker as well therapeutic target for modulating inflammation. The monoclonal antibody 174-5 has been shown to cross-react with rat VAP-1 and to inhibit lymphocyte infiltration in rat liver allograft rejection.

Immunogen Purified vessels from human peripheral lymph nodes (ref 1).

Aliases Vascular adhesion Protein-1, membrane primary amine oxidase; AOC3; SSAO.

Cross reactivity Rat: Yes

References

1. Martelius, T et al; Blockade of vascular adhesion protein-1 inhibits lymphocyte infiltration in rat liver allograft rejection. Am J Path 2004, *165*: 1993.
2. Autio, A et al; PET imaging of inflammation and adenocarcinoma zenografts using vascular adhesion protein 1 targeting peptide 68Ga-DOTAVAP-P1: comparison with 18F-FDG, Eur J Nucl Med Mol Imaging 2010, *37*:1918.

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.