OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for AM26204PU-N

VAP1 (AOC3) Mouse Monoclonal Antibody [Clone ID: 174-5]

Product data:

Product Type:	Primary Antibodies
Clone Name:	174-5
Applications:	FN, IF, IHC
Recommended Dilution:	**Immunohistochemistry on frozen sections:** 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). Typical starting working dilution is 1:50. **Flow cytometry:** Stains Ax cells stably transfected with VAP-1 cDNA.. As negative control mock transfected cells were used.(Ref.1). Typical starting working dilution is 1:50. **Functional assay:** 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). **Immunoflourescence** (Ref1,2). **Positive control:** Ax cells stably transfected with VAP-1 cDNA. (Ref. 1). **Negative control:** Mock transfected Ax cells. (Ref. 1).
Reactivity:	Human, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Purified vessels from human peripheral lymph nodes (ref 1)
Specificity:	This antibody detects Vascular Adhesion Protein-1 (VAP-1).
Formulation:	PBS State: Purified State: Liquid 0.2 µm filtered Ig fraction Stabilizer: 0.1% bovine serum albumin
Concentration:	lot specific
Purification:	Protein G
Conjugation:	Unconjugated
Storage:	Store at 2 - 8 °C.
Stability:	Shelf life: one year from despatch.

View online »

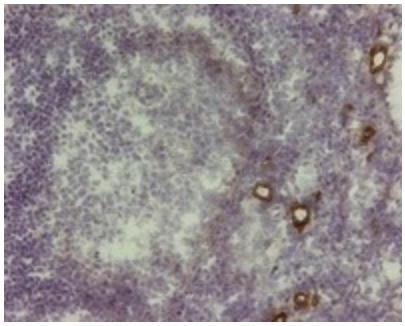
Gene Name: amine oxidase, copper containing 3

Database Link: Entrez Gene 8639 Human
Q16853

Background: Vascular Adhesion Protein-1 (VAP-1) 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.

Synonyms: HPAO

Product images:



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