

# 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

	<b>Positive control:</b> Ax cells stably transfected with VAP-1 cDNA. (Ref. 1). <b>Negative control:</b> Mock transfected Ax cells. (Ref. 1).
Reactivity:	Human, Rat
Host:	Mouse
lsotype:	lgG1
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 lg 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.

Immunoflourescence (Ref1,2).

antibody served as a negative control. (Ref.1).

#### OriGene Technologies, Inc.

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	VAP1 (AOC3) Mouse Monoclonal Antibody [Clone ID: 174-5] – AM26204PU-N
Gene Name:	amine oxidase, copper containing 3
Database Link:	<u>Entrez Gene 8639 Human</u> <u>Q16853</u>
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.
Svnonvms:	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.

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