Datasheet for ABIN2192061

anti-AOC3 antibody

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Overview

Quantity:	100 µg
Target:	AOC3
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This AOC3 antibody is un-conjugated
Application:	Flow Cytometry (FACS), Immunohistochemistry (Frozen Sections) (IHC (fro)), Functional Studies (Func)

Product Details

Clone:	174-5
Isotype:	IgG1
Cross-Reactivity (Details):	Cross reactivity: Rat : Yes
Sterility:	0.2 µm filtered

Target Details

Target:	AOC3
Alternative Name:	Vascular Adhesion Protein-1 (AOC3 Products)
Background:	The monoclonal antibody 174-5 recognises 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

Target Details

	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. Aliases membrane primary amine oxidase, AOC3, SSAO Immunogen Purified vessels from human peripheral lymph nodes (ref 1)
Pathways:	Feeding Behaviour

Application Details

Application Notes:	For immunohistochemistry and flow cytometry, dilutions to be used depend on detection system chemistry, , applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50. For functional studies, in vitro dilutions have to be optimized in user's experimental setting. Positive Ax cells stably transfected with VAP-1 cDNA. (Ref. 1) VAP control Negative Mock transfected Ax cells. (Ref. 1) control
Restrictions:	For Research Use only

Handling

Buffer:	PBS, containing 0.1 % bovine serum albumin.
Storage:	4 °C
Storage Comment:	Product should be stored at 4 °C. Under recommended storage conditions, product is stable for at least one year. The exact expiry date is indicated on the label.

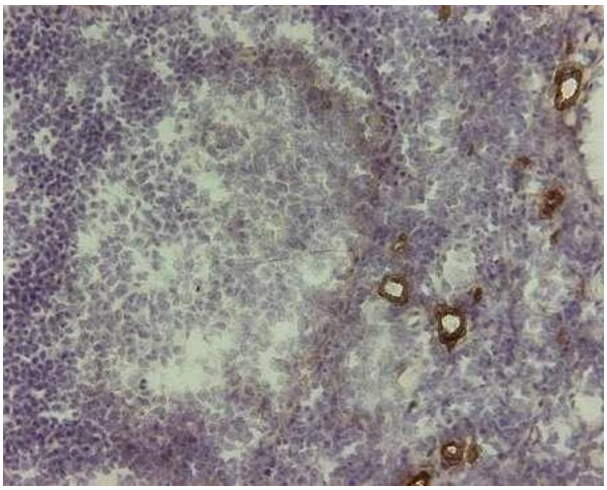
Publications

Product cited in:

Zwirner, Felber, Burger, Bitter-Suermann, Riethmüller, Feucht: "Classical pathway of complement activation in mammalian kidneys." in: **Immunology**, Vol. 80, Issue 2, pp. 162-7, (1994) (PubMed).

Feucht, Schneeberger, Hillebrand, Burkhardt, Weiss, Riethmüller, Land, Albert: "Capillary deposition of C4d complement fragment and early renal graft loss." in: **Kidney international**, Vol. 43, Issue 6, pp. 1333-8, (1993) (PubMed).

Images



Immunohistochemistry

Image 1. 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.