



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

VAP-1 (h): 293T Lysate: sc-116189

BACKGROUND

Lymphocyte binding to vascular endothelium is a prerequisite for the movement of immune cells from the blood into lymphoid tissues and into sites of inflammation. Under inflammatory conditions, cell surface expression of VAP-1 (vascular adhesion protein-1), which is an endothelial sialoglycoprotein, is induced. VAP-1 is a type II transmembrane protein with a single transmembrane domain and N- and O-glycosylation sites in the extracellular domain. *In vivo*, VAP-1 exists predominantly as a homodimer and functions both as an enzyme (monoamine oxidase) and an adhesion molecule for lymphocytes. With the appropriate glycosylation and in the correct inflammatory setting, expression of VAP-1 on the luminal endothelial cell surface allows it to mediate lymphocyte adhesion and to function as an adhesion receptor involved in lymphocyte recirculation. VAP-1 is also expressed in all types of smooth muscle cells, except in cardiac and skeletal muscle cells. VAP-1 localized on smooth muscle cells does not support binding of lymphocytes, but it deaminates exogenous and endogenous primary amines. Soluble VAP-1 is found in circulation and its level is increased in patients who have inflammatory liver diseases.

REFERENCES

- Salminen, T.A., Smith, D.J., Jalkanen, S. and Johnson, M.S. 1998. Structural model of the catalytic domain of an enzyme with cell adhesion activity: human vascular adhesion protein-1 (HVAP-1) D4 domain is an amine oxidase. *Protein Eng.* 11: 1195-1204.
- Smith, D.J., Salmi, M., Bono, P., Hellman, J., Leu, T. and Jalkanen, S. 1998. Cloning of vascular adhesion protein-1 reveals a novel multifunctional adhesion molecule. *J. Exp. Med.* 188: 17-27.
- Kurkijarvi, R., Adams, D.H., Leino, R., Mottonen, T., Jalkanen, S. and Salmi, M. 1998. Circulating form of human vascular adhesion protein-1 (VAP-1): increased serum levels in inflammatory liver diseases. *J. Immunol.* 161: 1549-1557.
- Slami, M., Tohka, S. and Jalkanen, S. 2000. Human vascular adhesion protein-1 (VAP-1) plays a critical role in lymphocyte-endothelial cell adhesion cascade under shear. *Circ. Res.* 86: 1245-1251.
- Tohka, S., Laukkanen, M., Jalkanen, S. and Salmi, M. 2001. Vascular adhesion protein-1 (VAP-1) functions as a molecular brake during granulocyte rolling and mediates recruitment *in vivo*. *FASEB J.* 15: 373-382.

CHROMOSOMAL LOCATION

Genetic locus: AOC3 (human) mapping to 17q21.31.

PRODUCT

VAP-1 (h): 293T Lysate represents a lysate of human VAP-1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

VAP-1 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive VAP-1 antibodies. Recommended use: 10-20 µl per lane.

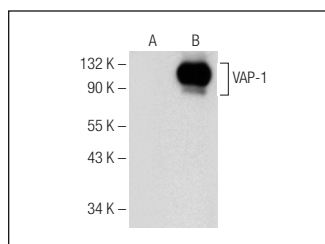
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

VAP-1 (D-1): sc-374561 is recommended as a positive control antibody for Western Blot analysis of enhanced human VAP-1 expression in VAP-1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



VAP-1 (D-1): sc-374561. Western blot analysis of VAP-1 expression in non-transfected: sc-117752 (A) and human VAP-1 transfected: sc-116189 (B) 293T whole cell lysates.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.