

ORDERING INFORMATION

Catalog Number: AF5820

Lot Number: CDGG01

Size: 100 μg

Formulation: 0.2 µm filtered solution in PBS

with 5% trehalose

Storage: -20° C

Reconstitution: sterile PBS

Specificity: human VAP-A

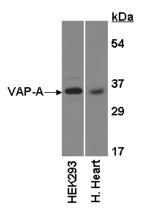
Immunogen: E. coli-derived rhVAP-A

(aa 2 - 132)

Ig Type: sheep IgG

Applications: Western blot

Direct ELISA



Detection of VAP-A with AF5820.

Cell and tissue lysates were resolved by SDS-PAGE, transferred to an Immobilon-P membrane and immunoblotted with 1.0 μ g/mL sheep anti-hVAP-A.

Anti-human VAP-A Antibody

Background

VAP-A (VAMP-associated protein A; also VAP-33) is a 33 kDa integral membrane protein that is ubiquitously expressed, and found associated with multiple cellular organelles, including the Golgi, endosomes, tight junctions and the cell membrane. VAP-A appears to be pleiotrophic in function, participating in synaptic vesicle fusion, maintenance of tight junction integrity and the regulation of cholesterol synthesis. Human VAP-A is a type IV (small luminal domain) transmembrane protein 249 amino acids (aa) in length. It is almost all cytoplasmic (aa 1 - 227) with a one aa luminal fragment. The cytoplasmic region contains an MSP/motile sperm protein domain (aa 14 - 131) plus a coiled-coil region (aa 169 - 205). VAP-A homo- and hetero-dimerizes with VAP-B. It has multiple binding partners within the cell. There is one potential alternative start site at Met8, and an isoform that shows a 44 aa insertion after Leu140. Over aa 1 - 132, human VAP-A shares 97% aa identity with mouse VAP-A.

Preparation

Produced in sheep immunized with purified, *E. coli*-derived, recombinant human VAP-A (rhVAP-A; aa 2 - 132; Accession # Q9P0L0). Human VAP-A specific IgG was purified by human VAP-A affinity chromatography.

Formulation

Lyophilized from a 0.2 μm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

Reconstitution

Reconstitute with sterile PBS. If 0.5 mL of PBS is used, the antibody concentration will be 0.2 mg/mL.

Storage

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a manual defrost freezer for six months without detectable loss of activity. Avoid repeated freeze-thaw cycles.

Specificity

This antibody has been selected for its ability to recognize human VAP-A in direct ELISAs and Western blots. In direct ELISAs, this antibody shows less than 1% cross-reactivity with rhVAP-B and rrVAP-B.

Applications

Western blot - An antibody concentration of 1.0 μg/mL is recommended.

Direct ELISA - This antibody can be used at 0.5 - $1.0 \mu g/mL$ with the appropriate secondary reagents to detect human VAP-A. The detection limit for rhVAP-A is approximately 0.3 ng/well.

Optimal dilutions should be determined by each laboratory for each application.