Technical Data Sheet

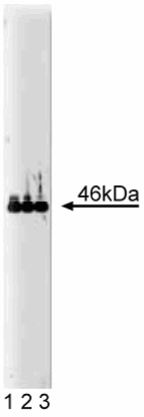
Purified Mouse Anti-VASP

Product Information

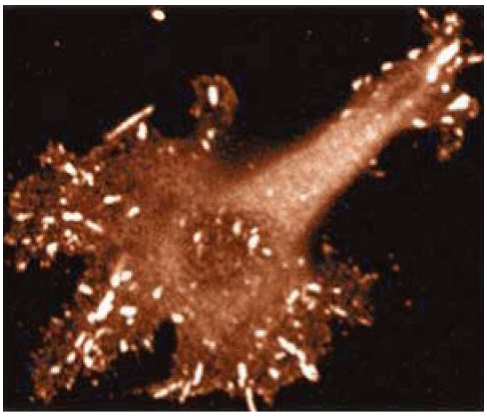
Material Number:	**610447**
Size:	50 µg
Concentration:	250 µg/ml
Clone:	43/VASP
Immunogen:	Human VASP aa. 248 - 379
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Human Tested in Development: Dog
Target MW:	46 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

Vasodilator-stimulated phosphoprotein (VASP), a substrate for cAMP- and cGMP-dependent kinases, is associated with actin filaments, focal adhesions, and dynamic membrane regions. VASP is composed of several distinct domains: a central L-proline-rich domain contains a GPPPPP motif as a single copy and as a three-fold tandem repeat, as well as three conserved phosphorylation sites for cyclic nucleotide-dependent protein kinases (Ser157, Ser239, and Thr278). A C-terminal domain contains a repetitive mixed-charge cluster which is predicted to form an α-helix. The C-terminal domain appears to be responsible for anchoring at focal adhesion sites. VASP has been shown to be a ligand for profilins. Profilins bind to the poly-L-proline motifs of VASP and it is postulated that these two molecules act in concert to convey signal transduction to actin filament formation.



Western blot analysis of VASP on human endothelial cell lysate. *Lane 1: 1:500, lane 2: 1:1000, lane 3: 1:2000 dilution of anti-VASP.*



Immunostaining of Human Endothelial cells.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Store undiluted at -20°C.

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Application Notes

Application

Western blot	Routinely Tested
Immunofluorescence	Tested During Development
Immunoprecipitation	Not Recommended
Immunohistochemistry	Not Recommended

Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml.

Suggested Companion Products

Catalog Number	Name	Size	Clone
611450	Human Endothelial Cell Lysate	500 µg	(none)
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Ig	0.5 mg	Polyclonal

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

DeMali KA, Barlow CA, Burridge K. Recruitment of the Arp2/3 complex to vinculin: coupling membrane protrusion to matrix adhesion. *J Cell Biol.* 2002; 159(5):881-891.(Clone-specific: Western blot)

Haffner C, Jarchau T, Reinhard M, Hoppe J, Lohmann SM, Walter U. Molecular cloning, structural analysis and functional expression of the proline-rich focal adhesion and microfilament-associated protein VASP. *EMBO J.* 1995; 14(1):19-27.(Biology)

Howe AK, Hogan BP, Juliano RL. Regulation of vasodilator-stimulated phosphoprotein phosphorylation and interaction with Abl by protein kinase A and cell adhesion. *J Biol Chem.* 2002; 277(41):38121-38126.(Clone-specific: Western blot)

Lawrence DW, Pryzwansky KB. The vasodilator-stimulated phosphoprotein is regulated by cyclic GMP-dependent protein kinase during neutrophil spreading. *J Immunol.* 2001; 166(9):5550-5556.(Clone-specific: Immunofluorescence, Immunoprecipitation, Western blot)

Reinhard M, Giehl K, Abel K. The proline-rich focal adhesion and microfilament protein VASP is a ligand for profilins. *EMBO J.* 1995; 14(8):1583-1589.(Biology)