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Store at -20C
#3132

VASP (9A2) Rabbit mAb

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP, IF-F, IF-IC	H M R Hm Mk B	Endogenous	46, 50	Rabbit	#P50552	7408

Product Usage Information

Application

Western Blotting
Immunoprecipitation
Immunofluorescence (Frozen)
Immunofluorescence (Immunocytochemistry)

Dilution

1:1000
1:500
1:200
1:400

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

VASP (9A2) Rabbit mAb detects endogenous levels of total VASP protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human and mouse VASP.

Background

Vasodilator-stimulated phosphoprotein (VASP) was originally characterized as a substrate of both cGMP- and cAMP-dependent kinases (PKG and PKA, or cGPK and cAPK, respectively) (1). It is now believed that VASP belongs to the Ena/VASP family of adaptor proteins linking the cytoskeletal system to the signal transduction pathways and that it functions in cytoskeletal organization, fibroblast migration, platelet activation, and axon guidance (2,3). Three phosphorylation sites, Ser157, Ser239, and Thr278, have been identified. Ser239 is the major PKG phosphorylation site, while Ser157 is the major PKA phosphorylation site (4). Evidence suggests that VASP phosphorylation reduces its association with actin and has a negative effect on actin polymerization (5). Phosphorylation at Ser239 of VASP is a useful marker for monitoring PKG activation and signaling (6,7).

Background References

- Butt, E. et al. (1994) *J Biol Chem* 269, 14509-17.
- Ball, L.J. et al. (2000) *EMBO J* 19, 4903-14.
- Machesky, L.M. (2000) *Cell* 101, 685-8.
- Smolenski, A. et al. (1998) *J Biol Chem* 273, 20029-35.
- Harbeck, B. et al. (2000) *J Biol Chem* 275, 30817-25.
- Oelze, M. et al. (2000) *Circ Res* 87, 999-1005.
- Lawrence, D.W. and Pryzwansky, K.B. (2001) *J Immunol* 166, 5550-6.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IP:** Immunoprecipitation **IF-F:** Immunofluorescence (Frozen) **IF-IC:** Immunofluorescence (Immunocytochemistry)

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat **Hm:** Hamster **Mk:** Monkey **B:** Bovine

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