#3120 Store at –20°C

VASP (A290) Antibody

☑ 100 µl
(10 western blots)

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Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W Endogenous	H, Mk	46, 50 kDa	Rabbit**

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 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).

Specificity/Sensitivity: VASP (A290) Antibody detects endogenous levels of total VASP protein.

Source/Purification: Polyclonal antibodies are produced by immunizing rabbits with a synthetic peptide (KLH-coupled) corresponding the carboxy-terminal sequence of human VASP. Antibodies are purified by peptide affinity chromatography.

Background References:

(1) Butt, E. et al. (1994) *J. Biol. Chem.* 269, 14509–14517.

(2) Ball, L.J. et al. (2000) *EMBO J.* 19, 4903–4914.

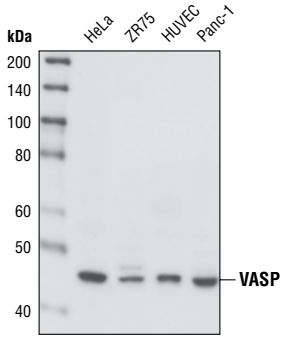
(3) Machesky, L.M. et al. (2000) *Cell* 101, 685–688.

(4) Smolenski, A. et al. (1998) *J. Biol. Chem.* 273, 20029–20035.

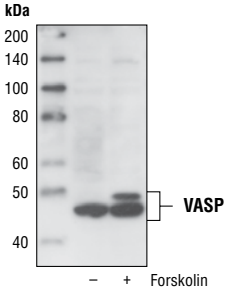
(5) Harbeck, B. et al. (2000) *J. Biol. Chem.* 275, 30817–30825.

(6) Oelze, M. et al. (2000) *Circ. Res.* 87, 999–1005.

(7) Lawrence, D.W. et al. (2001) *J. Immunol.* 166, 5550–5556.



Western blot analysis of extracts from various cell types, using VASP (A290) Antibody.



Western blot analysis of extracts from HeLa cells, untreated or forskolin-treated (10 µM, 15 minutes), using VASP (A290) Antibody.

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. *Do not aliquot the antibody.*

***Species cross-reactivity is determined by western blot.**

****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting	1:1000

For application specific protocols please see the web page for this product at www.cellsignal.com.

Please visit www.cellsignal.com for a complete listing of recommended companion products.

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

Applications Key: **W**—Western **IP**—Immunoprecipitation **IHC**—Immunohistochemistry **ChIP**—Chromatin Immunoprecipitation **IF**—Immunofluorescence **F**—Flow cytometry **E-P**—ELISA-Peptide

Species Cross-Reactivity Key: **H**—human **M**—mouse **R**—rat **Hm**—hamster **Mk**—monkey **Mi**—mink **C**—chicken **Dm**—D. melanogaster **X**—Xenopus **Z**—zebrafish **B**—bovine **Dg**—dog **Pg**—pig **Sc**—S. cerevisiae **Ce**—C. elegans **Hr**—horse **All**—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.