

phospho-VASP (Thr-278) Peptide

Cat. # VX2785

Size 50 µg

Background:

Actin filament tethering and bundling are important mechanisms involved in actin superstructure assembly. The ENA/VASP family includes VASP, mena, and Ena-Vasp-like (EVL). These multidomain proteins localize to the leading edge of filopodia where they associate with AFs, interact with profilin, and compete with capping proteins at the barbed end of AFs. Artificial relocation of VASP from the plasma membrane to mitochondrial membranes inhibits filopodial formation and axon branching, while deletion of all three ENA/VASP proteins produces defects in cortical axon-tract formation. Regulation of VASP protein activity occurs through phosphorylation at Ser-157, Ser-239, and Thr-278. AMPK phosphorylates Thr-278, leading to impaired actin stress fiber assembly and changes in cell morphology.

References

Krause, M. et al. (2003) Annu Rev Cell Dev Biol. 19: 541.
Blume, C. et al. (2007) J Biol Chem. 282(7):4601.
Applewhite, D.A. et al. (2007). Mol Biol Cell. 18(7):2579.

Peptide Sequence:

Phospho-VASP (Thr-278) synthetic peptide corresponding to amino acids surrounding threonine 278 in human VASP. This sequence has significant homology to the conserved site in rat and mouse VASP.

Buffer and Storage:

Blocking Peptide is supplied in 50µl phosphate-buffered saline and 0.05% sodium azide.
Store at -20°C. Stable for 1 year.

Applications:

Blocking 1:1000

ELISA 50 ng/well

End user should determine optimal concentration dependent on the concentration of the antibody.
Recommended for blocking antibody reactivity in Western blot and immunocytochemistry.
ELISA established in 96-well Nunc immunoplates where peptide was bound to plates for 2 hrs in 0.1 M sodium carbonate buffer, pH 8.5.

Specificity:

This peptide is specifically recognized by phospho-specific VASP (Thr-278) antibody (VP2781) in ELISA, and has been shown to block the reactivity of VP2781 in Western blot and is recommended for blocking in immunocytochemistry.

Related Products:

VP2781 VASP (Thr-278), phospho-specific Rabbit Polyclonal
VM2771 VASP (C-terminal region) Mouse Monoclonal
FM2651 Fascin (clone 55K2) Mouse Monoclonal
FP2661 Fascin (Ser-39), phospho-specific Rabbit Polyclonal
AP1651 Actin (N-terminal Region) Rabbit Polyclonal
AP1671 Actin (Tyr-53), phospho-specific Rabbit Polyclonal

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