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Anti-VASP (Thr-278), Phosphospecific Antibody

Catalog # AN2007

Product Information

Application	WB, ICC
Primary Accession	P50552
Host	Rabbit
Clonality	Rabbit Polyclonal
Isotype	IgG
Calculated MW	39830

Additional Information

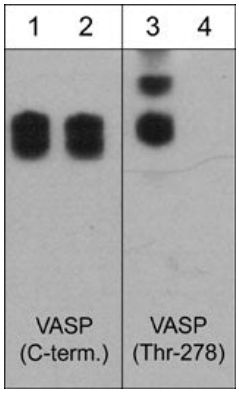
Gene ID	7408
Other Names	vasodilator-stimulated phosphoprotein
Dilution	WB~~1:1000 ICC~~N/A
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Anti-VASP (Thr-278), Phosphospecific Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

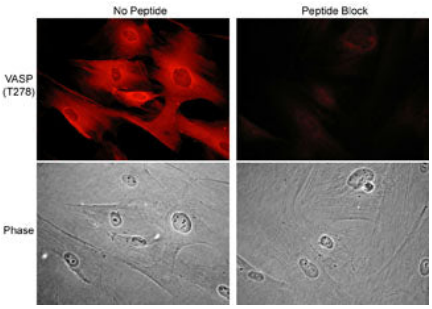
Background

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 relocalization 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.

Images

Western blot image of human A431 cells stimulated with calyculin A (100 nM) for 30 min. The blots were untreated (lanes 1 & 3) or treated with lambda phosphatase (lanes 2 & 4), then probed with mouse monoclonal VASP (C-term.) antibody (lanes 1 & 2) or rabbit polyclonal VASP (Thr-278) phospho-specific antibody (lanes 3 & 4).





Immunocytochemical labeling of VASP phosphorylation in rabbit spleen fibroblasts treated with Calyculin A. The cells were labeled with rabbit polyclonal VASP (Thr-278) antibody, then detected using appropriate secondary antibodies conjugated to Cy3. The antibody was used in the absence (top left) or presence (top right) of blocking peptide (VX2785). Corresponding phase images are shown bottom left and right.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.