anti-VASP

rabbit antiserum

Lot: # 209

data sheet 0609— catalog # 0017-10



immunoGlobe Antikörpertechnik GmbH

Background information

VASP (vasodilator stimulated phosphoprotein) is a proline-rich²⁸ protein substrate of cAMP- and kinases^{27,31-45} protein cGMP-dependent Phosphorylation of VASP at Ser-157 causes a mobility shift in SDS gel electrophoresis from 46 to 50 kDa^{31,44}, which has been used as a convenient marker to monitor cyclic nucleotidedependent protein kinase activity^{25,27,31-44}. VASP is the founding member of the Ena-VASP protein family, comprising the Drosophila protein Enabled (Ena), its mouse homologue Mena (mammalian Enabled), and mouse EVL (Ena-VASP-like protein)¹⁶. With these proteins VASP shares a conserved overall domain organization: a) the conserved N-terminal Ena-VASP homology domain 1 (EVH1), which mediates binding to a defined proline-rich motif¹⁹, b) a more divergent proline-rich central domain (which is responsible for profilin, SH3, and WW domain binding)¹⁶, and c) a conserved C-terminal EVH2 oligomerization¹⁸ domain. VASP is expressed in a variety of mammalian cell types and tissues^{23,36,37,40,45}. In cultured cells, VASP is associated with focal adhesions, cellcell contacts, microfilaments, and highly dynamic membrane regions 16,17,30,40. Functional evidence indicates that VASP is a crucial factor involved in the regulation of actin filament dynamics and actin-dependent motility of cells and intracellular bacterial pathogens¹² Refs. 1,5,6,8,11,13,14,16,17,46</sup>). (for a review see

Antiserum preparation and storage

100 μ l of rabbit antiserum containing 0.02% NaN $_3$ (vials have been overfilled by 10% to ensure complete recovery of the specified amount). For repeated use store at 4°C (short term). Stable for one year from date of shipment when stored at -20°C.

Antigen

The antibody was raised against His-tagged human VASP.

Species cross-reactivity Human

Applications

Western (immuno) blotting (dilution 1:1500 - 1:3000), immunofluorescence of formaldehyde fixed cells (dilution 1:500 - 1:1000), immunoprecipitation: not tested. All dilutions refer to the analysis of cells and tissues with intermediate to high levels of human VASP expression and must be viewed as approximate. The antiserum should be titrated for each individual application.

Positive control

Human platelet protein (500 μ g), supplied at 5 mg/ml in SDS sample buffer. Use 5 μ l (25 μ g) per lane.

Related products

- affinity purified rabbit antibody IG731 to human VASP, 100 μI (25 μg; catalog # 0012-02)
- monoclonal antibody IE273 to human VASP, 50 μg (catalog # 0016-05)
- positive control: human platelet protein in SDS sample buffer, 500 µg (catalog # 8010-50)

References

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