a n t i - V A S P
affinity purified rabbit antibody IG731

Lot: # 881 **data sheet 0505— catalog # 0012-02**

immunoGlobe
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Background information

VASP (vasodilator stimulated phosphoprotein) is a proline-rich[28] protein substrate of cAMP- and cGMP-dependent protein kinases[27,31-45]. 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 nucleotide-dependent 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 motif[19], 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 oligomerization[18] 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, cell-cell 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 pathogens[12] (for a review see Refs.[1,5,6,8,11,13,14,16,17,46]).

Antibody preparation and storage

25 µg (100 µl) of purified antibody in PBS, with 1 mg/ml BSA, with 0.02% NaN_3. Antibody concentration: 250 µg/ml. Vials have been overfilled by 10% to ensure complete recovery of the specified amount. Stable for one year from date of shipment when stored at -20°C.

Antigen

The antibody was raised against human His_6-VASP and has been affinity purified on the antigen.

Species cross-reactivity

Human, mouse, porcine

Specificity

The antibody recognizes both the 46 kDa (Ser-157 dephospho) and 50 kDa (Ser-157 phospho) form of VASP.

Applications

Western (immuno) blotting (0.1 µg/ml; dilution 1:2.500), immunofluorescence of formaldehyde fixed cells (1 µg/ml; dilution 1:250), immuno-precipitation (2 µg/ml; dilution 1:125). 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 antibody should be titrated for each individual application.

Positive control

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

Related products

- 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)

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