

Immunotag™ VASP (phospho Ser157) Polyclonal Antibody

Antibody Specification	
Catalog No.	ITP0271
Product Description	Immunotag™ VASP (phospho Ser157) Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	VASP (Ser157)
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC-p,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/5000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat,Monkey
Host Species	Rabbit
Immunogen	The antiserum was produced against synthesized peptide derived from human VASP around the phosphorylation site of Ser157. AA range:124-173
Specificity	Phospho-VASP (S157) Polyclonal Antibody detects endogenous levels of VASP protein only when phosphorylated at S157.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	VASP
Accession No.	P50552 P70460
Alternate Names	VASP; Vasodilator-stimulated phosphoprotein; VASP

Antibody Specification

Description	vasodilator-stimulated phosphoprotein(VASP) Homo sapiens Vasodilator-stimulated phosphoprotein (VASP) is a member of the Ena-VASP protein family. Ena-VASP family members contain an EHV1 N-terminal domain that binds proteins containing E/DFPPPPXD/E motifs and targets Ena-VASP proteins to focal adhesions. In the mid-region of the protein, family members have a proline-rich domain that binds SH3 and WW domain-containing proteins. Their C-terminal EVH2 domain mediates tetramerization and binds both G and F actin. VASP is associated with filamentous actin formation and likely plays a widespread role in cell adhesion and motility. VASP may also be involved in the intracellular signaling pathways that regulate integrin-extracellular matrix interactions. VASP is regulated by the cyclic nucleotide-dependent kinases PKA and PKG. [provided by RefSeq, Jul 2008],
Cell Pathway/ Category	Focal adhesion,Fc gamma R-mediated phagocytosis,Leukocyte transendothelial migration,
Protein Expression	Fetal lung,Fetal spleen,Platelet,Promyelocyte,Skin,
Subcellular Localization	cytoplasm,cytosol,cytoskeleton,plasma membrane,cell-cell adherens junction,bicellular tight junction,focal adhesion,actin cytoskeleton,lamellipodium,filopodium,lamellipodium membrane,filopodium membrane,
Protein Function	domain:The EVH2 domain is comprised of 3 regions. Block A is a thymosin-like domain required for G-actin binding. The KLKR motif within this block is essential for the G-actin binding and for actin polymerization. Block B is required for F-actin binding and subcellular location, and Block C for tetramerization.,domain:The WH1 domain mediates interaction with XIRP1.,function:Ena/VASP proteins are actin-associated proteins involved in a range of processes dependent on cytoskeleton remodeling and cell polarity such as axon guidance and lamellipodial and filopodial dynamics in migrating cells. VASP promotes actin nucleation and increases the rate of actin polymerization in the presence of capping protein. Plays a role in actin-based activity of Listeria monocytogenes in platelets.,PTM:Major substrate for cAMP-dependent (PKA) and cGMP-dependent protein kinase (PKG) in platelets. The preferred site for PKA is Ser-157, the preferred site for PKG, Ser-239. In ADP-activated platelets, phosphorylation by PKA or PKG on Ser-157 leads to fibrinogen receptor inhibition. Phosphorylation on Thr-278 requires prior phosphorylation on Ser-157 and Ser-239. In response to phorbol ester (PMA) stimulation, phosphorylated by PKC/PRKCA. In response to thrombin, phosphorylated by both PKC and ROCK1.,similarity:Belongs to the Ena/VASP family.,similarity:Contains 1 WH1 domain.,subcellular location:Targeted to stress fibers and focal adhesions through interaction with a number of proteins including MRL family members. Localizes to the plasma membrane in protruding lamellipodia and filopodial tips. Stimulation by thrombin or PMA, also translocates VASP to focal adhesions.,subunit:Homotetramer. Interacts with PFN1, PFN2, LPP, ACTN1 and ACTG1. Interacts, via the EVH1, with the Pro-rich regions of ZYX. This interaction is important for targeting to focal adhesions and the formation of actin-rich structures at the apical surface of cells. Interacts, via the EVH1 domain, with the Pro-rich domain of Listeria monocytogenes actA. Interacts with APBB1IP. Interacts, via the Pro-rich domain, with the C-terminal SH3 domain of DNMBP.,tissue specificity:Highly expressed in platelets.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.