abcam

ab58555

Anti-VASP (phospho S157) antibody [5C6]

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	Preservative: 0.1% Sodium azide
Form	Liquid
Clonality	Monoclonal
Immunogen	Synthetic Peptide within Human VASP pS157 conjugated to Keyhole Limpet Haemocyanin. The exact immunogen used to generate this antibody is proprietary information. Database link P50552
Clone number	5C6
Purification technique	Size-exclusion chromatography
Specificity	This antibody recognizes the the ~50 kDa VASP protein phosphorylated at Ser^{157}. It does not cross-react with non-phosphorylated VASP or with un-related phosphorylation sites.
Concentration	0.1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Mouse monoclonal antibody purified from serum-free cell culture supernatant by thiophilic adsorption and size exclusion chromatography.

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	0.5 µg for 10^6 Cells
Notes	ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

Target data

See full target information VASP pS157

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, lamellipodial and filopodial dynamics, platelet activation and cell migration. VASP promotes actin filament elongation. It protects the barbed end of growing actin filaments against capping and increases the rate of actin polymerization in the presence of capping protein. VASP stimulates actin filament elongation by promoting the transfer of profilin-bound actin monomers onto the barbed end of growing actin filaments. Plays a role in actin-based mobility of Listeria monocytogenes in host cells. Regulates actin dynamics in platelets and plays an important role in regulating platelet aggregation.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	VASP also known as Vasodilator-Stimulated Phosphoprotein is a 46-50 kDa protein involved in actin filament assembly and elongation. It plays an important role in cellular motility and the maintenance of cell shape. VASP is expressed in many cell types but is notably present in platelets and endothelial cells. It is an important

	player in signal transduction pathways that lead to cytoskeletal reorganization influencing cell movement and adhesion dynamics.
Biological function summary	VASP is an important component in cell movement regulation. It acts within a larger complex of actin-binding proteins that control the assembly of actin filaments. This protein influences cell adhesion migration and signal transduction processes. Through these actions VASP influences cellular responses to environmental cues making it essential for cellular dynamics and integrity during development and wound healing.
Pathways	VASP connects to significant signaling pathways such as the PI3K/Akt pathway and the cAMP pathway. It often interacts with proteins like c-Abl tyrosine kinase and Mena contributing to actin dynamics regulation. These pathways are critical for transducing signals from extracellular environments to intracellular responses allowing for coordinated cellular functions in processes such as cell migration and growth.
Associated diseases and disorders	VASP plays a role in cardiovascular disease and cancer-related metastasis due to its function in cell motility and adhesion. Abnormal VASP activity is associated with impaired endothelial cell function and contributes to atherosclerosis development. Additionally it interacts with proteins like Mena and fascin in cancer cells aiding in metastatic progression by enhancing motility and invasive capabilities.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

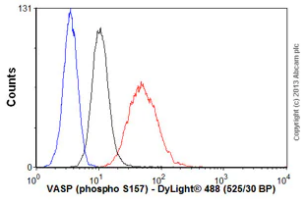
We do not recommend this combination. It is not covered by our product promise.

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1 product image



Flow Cytometry - Anti-VASP (phospho S157) antibody [5C6] (ab58555)

VASP (phospho S157) Flow Cytometry staining using mouse Anti-VASP (phospho S157) antibody

Overlay histogram showing THP1 cells stained with ab58555 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab58555, 0.5µg/1x10^6 cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line). Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.

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