

AM00157PU-N**Monoclonal Antibody to VASP pSer239 (incl. pos. control) - Purified****Alternate names:** Vasodilator-stimulated phosphoprotein**Quantity:** 0.1 mg

Background: VASP (vasodilator stimulated phosphoprotein) plays an important role in ANF / NO / cGMP Protein kinase and cAMP / cAMP Protein kinase signalling pathways. VASP is expressed in almost all human and animal cell lines; particularly high concentrations are found in thrombocytes, vascular smooth muscle cells and fibroblasts. In cultured cells VASP is associated with focal contacts, cell-cell-contacts, microfilaments and dynamic membrane regions such as the leading edge. In vitro binding data show that VASP binds to profilin, zyxin, vinculin, and the Listeria spp. surface protein ActA. Functional evidence indicates that VASP is a crucial factor involved in the enhancement of actin filament formation.

Uniprot ID: [P50552](#)**NCBI:** [NP_003361.1](#)**GeneID:** [7408](#)**Host / Isotype:** Mouse / IgG1**Recommended Isotype Controls:** SM10P (for use in human samples), AM03095PU-N**Clone:** 22E11**Immunogen:** Synthetic phosphopeptide conjugated to KLH.**Format:** **State:** Lyophilized purified IgG fraction.**Purification:** Subsequent Thiophilic Adsorption and Size Exclusion Chromatography.**Buffer System:** 2 x PBS/0.09% Na-azide/PEG and Sucrose.**Reconstitution:** Restore with 1 ml H₂O (15 min, RT).**Applications:** **ELISA:** Use at 0.05 µg/ml.**Western Blot:** 0.5 µg/ml for HRPO/ECL detection.**Recommended blocking buffer:** Casein/Tween 20 based blocking and blot incubation buffer AS00002BU-N or AS00002BU-L.**Flow Cytometry.****Included Positive Control:** Cell lysate from Forskolin-treated HepG2 cells (See Protocols for more details).

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity: This antibody recognizes VASP only, when Ser239 is phosphorylated, a site preferred by cGMP-dependent protein kinase (PKG) but also used by cAMP-dependent protein kinase (PKA). The antibody does not crossreact with the non-phosphorylated form of VASP nor with unrelated serine-phosphorylated proteins. Therefore, antibody VASP-22E11 is able to monitor the phosphorylation state of VASP serine 239 as well as PKA activity.

Species: Human and Mouse.
Other species not tested.

Storage: Store lyophilized (preferably in a desiccator) at -20°C and reconstituted (aliquote and freeze in liquid nitrogen) at -80°C.
Avoid repeated freezing and thawing.
Thaw aliquots at 37°C. Thawed aliquots may be stored at 4°C up to 3 months.
Shelf life: one year from despatch.

Protocols: **Positive Control Cell Lysate:**
HepG2 Forskolin treated

Format: Lyophilized cell lysate from HepG2 cells.

Reconstitution: Restore by addition of 200 µl H₂O. After complete solubilization add 200 µl 2x SDS-PAGE sample buffer, mix and incubate at 90°C for 5 min.

Application: The positive control cell lysate is recommended for immunoblot applications. 20 µl of positive control cell lysate correspond to ca. 20.000 cells. Use 20 µl/lane (mini gel) for HRPO/ECL detection of the target proteins.
Please NOTE: The lyophilized cell lysates contain SDS and are not recommended for applications with native proteins such as in immunoprecipitation.

Storage: Aliquote reconstituted product and store frozen. Avoid repeated freezing and thawing.

Pictures: **Phosphospecificity.** Whole cell extracts of control (co) or Sodium Nitroprusside (SNP) treated human platelets and extracts from control (co) or Forskolin (F) treated HepG2 cells were applied to SDS-PAGE and transferred to PVDF membranes. Immunoblots were probed with mab 22E11 (0.5 µg/ ml) for 1h at RT and developed by ECL (exp.time: 30 sec).

