Mouse Monoclonal Antibody to

VASP (phospho-Ser 239)

clone 16C2

Order No.: **0047-100/VASP-16C2**

Size (µg) 100

Lot No.: 0047S

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Isotype	Species Reactivity	Applications	Mol. Weight	Ref.Cell Line	Epitope	Immunogen
IgG1	human, mouse	WB, ELISA, IP, ICC, flow cytometry	46/50 kDa	none	phosphoserine 239 R K V pS K Q E	phosphopeptide conjugated to KLH

Background and Specificity:

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.

Mab VASP-16C2 recognizes VASP only, when Ser 239 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-16C2 is able to monitor the phosphorylation state of VASP serine 239 as well as PKA activity.

Purification: The antibody was purified from serum-free cell culture supernatant by subsequent thiophilic adsorption and size exclusion chromatography.

Formulation: lyophilized from 1 ml 2 x PBS / 0.09 % Na-azide / PEG and Sucrose.

Reconstitution: Reconstitute with 1 ml H_2O (15 min, RT).

Stability: For long-term storage, freeze lyophilizate upon arrival (-20°C). Upon reconstitution, aliquote and freeze in liquid nitrogen; reconstituted antibody can be stored frozen at -80°C up to 1 year. Thaw aliquots at 37°C. Thawed aliquots may be stored at 4°C up to 3 months.

Avoid repeated freeze / thaw cycles.

Positive Control: none

Immunoblotting: 0.5 µg/ml for HRPO/ECL detection
Recommended blocking buffer: BSA/Tween 20 based blocking and blot incubation buffer.

Immunoprecipitation: use at 1 - 10 µg per 10^6 pervanadate-treated A431 cells

Immunocytochemistry: use at 1 - 10 µg/ml. Mab VASP-16C2 may tolerate 0.5 % formaldehyde fixation

ELISA: use at 0.05 µg/ml

All products are supplied for research and investigational use only. Not for use in humans or laboratory animals.

Related Products

Blocking peptide for mab VASP-16C2
#2002-100/VASP pSer239

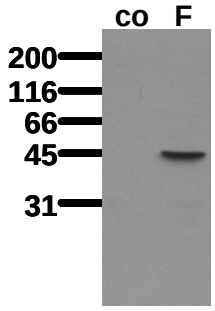
mab to VASP (phospho-Ser 157)
#0085-100/VASP-5C6

mab to VASP (phospho-Ser 239)
#0153-100/VASP-22E11

IMPORTANT!

THE USE OF ANTIBODIES SPECIFIC FOR PHOSPHORYLATED VASP FOR DIAGNOSTIC OR THERAPEUTIC PURPOSES IS PATENTED!

THE ANTIBODY IS SUPPLIED FOR RESEARCH USE ONLY!



Phosphospecificity

Whole cell extracts of control (co) or Forskolin (F) treated MDA-MB-231 tumor cells were applied to SDS-PAGE (ca 20.000 cells per lane) and transferred to PVDF membranes. Immunoblots were probed with mab 16C2 (0.5 µg/ ml) for 1h at RT and developed by ECL (exp. time: 30 sec).