

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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03/080507F

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.

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!

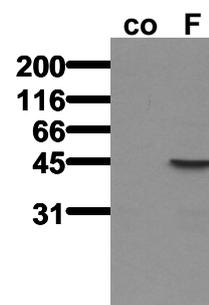
Purification:	The antibody was purified from serum-free cell culture supernatant by subsequent thiophilic adsorption and size exclusion chromatography.
Formulation:	lyophilized from 1 ml 2 x PBS / 0.09 % Na-azide / PEG and Sucrose.
Reconstitution:	Reconstitute with 1 ml H ₂ O (15 min, RT).
Stability:	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.



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).