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## **Mouse Monoclonal Antibody to**

## VASP (phospho-Ser 239)

### clone 16C2

# biotinylated

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

100 Size (µg) 0047S Lot No.:

**Species Reactivity** 

human, mouse WB, ELISA, IP, 46/50 kDa

ICC, flow cytometry

**Applications** 

Mol. Weight

none

**Ref.Cell Line** 

**Epitope** 

phosphoserine 239 RKVpSKQE

04/080507F

**Immunogen** 

phosphopeptide conjugated to KLH

#### **Background and Specificity:**

Isotype

IgG1

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.

The antibody was purified from serum-free cell culture **Purification:** 

supernatant by subsequent thiophilic adsorption and size

exclusion chromatography.

Formulation: liquid; 0.5 mg/ml in 2 x PBS/0,09% Na-Azide/PEG/Sucrose

Reconstitution:

Stability: Aliquote and freeze in liquid nitrogen; 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<sup>6</sup> pervanadate-treated A431 cells

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

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!