

#### Phospho-Ser152,156 MARCKS Antibody

Affinity purified rabbit polyclonal antibody Catalog # AN1015

### **Specification**

## Phospho-Ser152,156 MARCKS Antibody - Product Information

Application WB
Primary Accession P30009
Reactivity Rat

Predicted Bovine, Chicken, Human, Mouse, Xenopus,

Zebrafish Rabbit

Host Rabbit
Clonality polyclonal
Calculated MW 87 KDa

#### Phospho-Ser152,156 MARCKS Antibody - Additional Information

Gene ID 3028
Gene Name MARCKS

**Other Names** 

Myristoylated alanine-rich C-kinase substrate, MARCKS, Protein kinase C substrate 80 kDa protein, Marcks, Macs

#### Target/Specificity

Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser152/156 conjugated to KLH.

## **Dilution**

WB~~ 1:1000

### **Format**

Prepared from rabbit serum by affinity purification via sequential chromatography on phosphoand dephosphopeptide affinity columns.

### **Antibody Specificity**

Specific for the  $\sim 87k$  MARCKS protein phosphorylated at Ser152 and Ser156 in Western blots. Immunolabeling is blocked by the phosphopeptide used as the antigen but not by the corresponding dephosphopeptide. The immunolabeling is completely eliminated by  $\lambda$ -phosphatase

### **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

Phospho-Ser152,156 MARCKS Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### Shipping

Blue Ice

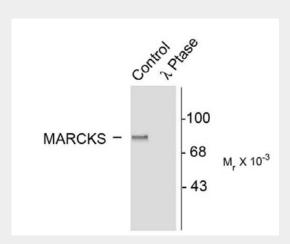


## Phospho-Ser152,156 MARCKS Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

### Phospho-Ser152,156 MARCKS Antibody - Images



Western blot of rat brain lysate showing specific immunolabeling of the ~87k MARCKS protein phosphorylated at Serr152,156 (Control). The phosphospecificity of this labeling is shown in the second lane (lambda-phosphatase:  $\lambda$ -Ptase). The blot is identical to the control except that it was incubated in  $\lambda$ -Ptase (1200 units for 30 min) before being exposed to the MARCKS Ser152,156 antibody. The immunolabeling is completely eliminated by treatment with  $\lambda$ -Ptase.

### Phospho-Ser152,156 MARCKS Antibody - Background

Myristoylated Alanine-Rich C Kinase Substrate (MARCKS) is a major substrate for phosphorylation by protein kinase C (PKC) (Ouimet et al., 1990). The phosphorylation of Ser152/156 can be used as a measure of PKC activation although these sites are also phosphorylated by PRK1 (Palmer et al., 1996) MARCKS is a member of a family of calmodulin binding proteins and phosphorylation of Ser152/156 modulates the binding of MARCKS to calmodulin (Verghese et al., 1994).

# Phospho-Ser152,156 MARCKS Antibody - References

Ouimet CC, Wang JKT, Walaas SI, Albert KA, Greengard P (1990) Localization of the MARCKS (87 kDa) protein, a major specific substrate for protein kinase C, in rat brain. J Neurosci 10:1683-1698. Palmer RH, Schönwasser DC, Rahman D, Pappin DJC, Herget T, Parker PJ (1996) PRK1 phosphorylates MARCKS at the PKC sites: Serine 152, serine 156 and serine 163. FEBS Lett 378:281-285.

Verghese GM, Johnson JD, Vasulka C, Haupt DM, Stumpo DJ, Blackshear PJ (1994) Protein kinase C-mediated phosphorylation and calmodulin binding of recombinant myristoylated alanine-rich C kinase substrate (MARCKS) and MARCKS-related protein. J Biol Chem 269:9361-9367.