

## Anti-MARCKS

Rabbit Polyclonal Antibody

**Catalog # M02-562R**

Lot # J1274-18

### Cited Applications

WB, IHC

*Suggested Dilutions:*

WB 1:10,000, IHC 1:500

*Ideal working dilutions for each application should be empirically determined by the investigator.*

### Specificity

Recognizes the MARCKS protein

### Cross Reactivity

Rat

### Host/Isotype/Clone#

Rabbit, IgG

### Immunogen

Recombinant protein expressed in and purified from E. coli

### Formulation

Neat Serum

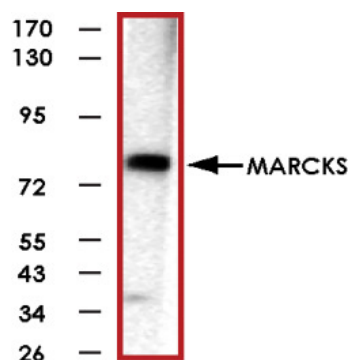
### Scientific Background

Myristoylated Alanine-Rich C Kinase Substrate (MARCKS) is a member of a family of calmodulin binding proteins that is a target for phosphorylation by protein kinase C (PKC) (1). MARCKS is concentrated in the synapses of neurons where it appears to function in synaptic vesicle cycling. MARCKS has been shown to bind both actin and calmodulin in vitro (2). Deletion of the MARCKS gene in mice results in embryonic brain defects and death (3). Phosphorylation of Ser152/156 modulates the binding of MARCKS to calmodulin (4).

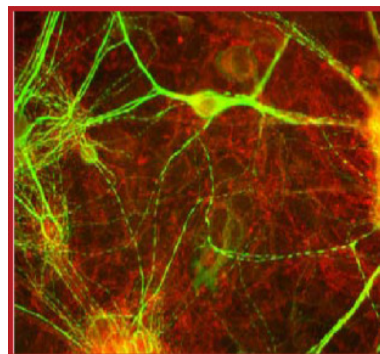
### References

1. Ouimet, C. C. et al: Localization of the MARCKS (87 kDa) protein, a major specific substrate for protein kinase C, in rat brain. 1990 J Neurosci 10:1683-1698.
2. Hartwig J H. et al: MARCKS is an actin filament crosslinking protein regulated by protein kinase C and calcium-calmodulin. Nature 1993;356: 618-622.
3. Stumpo D J. et al: MARCKS deficiency in mice leads to abnormal brain development and perinatal death. Proc. Nat. Acad. Sci. 1995 92: 944-948.
4. Verghese G M. et al: Protein kinase C-mediated phosphorylation and calmodulin binding of recombinant myristoylated alanine-rich C kinase substrate (MARCKS) and MARCKS-related protein. J BiolChem 1994 269:9361-9367.

### Sample Data



Western blot of rat cortex lysate showing specific immunolabeling of the ~80kDa MARCKS protein.



Mixed neuron/glia cultures stained with the Anti-MARCKS antibody (red) anti-MAP2 (green).

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Purification

Neat Serum

Stability

1yr at -20°C from date of shipment

Storage & Shipping

Store product at -20°C. For optimal storage, aliquot antibody into smaller quantities after centrifugation and store at recommended temperature. For optimal performance, avoid repeated handling and multiple freeze/thaw cycles. Product shipped on ice packs.

To place your order, please contact us by phone 1-(604)-232-4600, fax 1-604-232-4601 or by email: [orders@signalchem.com](mailto:orders@signalchem.com)  
[www.signalchem.com](http://www.signalchem.com)

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