Revision 1

Store at -20C

#11992

Phospho-MARCKS (Ser159/163) (D13D2) Rabbit mAb

Cell Signaling TECHNOLOGY®

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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP	H M R	Endogenous	75 (rodent), 80 (human)	Rabbit IgG	#P29966	4082

Product Usage Information

Application	Dilution
Western Blotting	1:1000
Immunoprecipitation	1:100

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Phospho-MARCKS (Ser159/163) (D13D2) Rabbit mAb recognizes endogenous levels of MARCKS protein when phosphorylated at Ser159 and Ser163 (human residues).

Species predicted to react based on 100% sequence homology

Monkey, Chicken, Xenopus, Zebrafish, Bovine, Pig

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Ser159 and Ser163 of human MARCKS protein.

Background

Myristoylated **A**lanine-**R**ich **C**-**K**inase **S**ubstrate (MARCKS) is a major PKC substrate expressed in many cell types. MARCKS has been implicated in cell motility, cell adhesion, phagocytosis, membrane traffic, and mitogenesis (1). PKC phosphorylates Ser159, 163, 167, and 170 of MARCKS in response to growth factors and oxidative stress. Phosphorylation at these sites regulates the calcium/calmodulin binding and filamentous (F)-actin cross-linking activities of MARCKS (2-4). Phosphorylation by PKC also results in translocation of MARCKS from the plasma membrane to the cytoplasm (5).

Background References

1. Ramsden, J.J. (2000) *Int J Biochem Cell Biol* 32, 475-9.
2. Heemskerk, F.M. et al. (1993) *Biochem Biophys Res Commun* 190, 236-41.
3. Graff, J.M. et al. (1989) *J Biol Chem* 264, 21818-23.
4. Hartwig, J.H. et al. (1992) *Nature* 356, 618-22.
5. Thelen, M. et al. (1991) *Nature* 351, 320-2.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: Human **M:** Mouse **R:** Rat

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Limited Uses

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