
anti-Rho A

Cat #: HM1322
Mouse monoclonal IgG
0.2 µg/µl, store at 4 °C

For research use only

BACKGROUND

The Ras p21 family of guanine nucleotide proteins play an important role in signal transduction pathway. They have high frequency of mutations in human malignancies. RhoA belongs to the small GTPase superfamily, Rho family. There are five mammalian Rho proteins (Rho A, B, C, 7 and 8) and they are approximately 30% homologous to Ras. RhoA regulates signal transduction pathways linking plasma membrane receptors to the assembly of focal adhesion and actin stress fibers.

SPECIFICITY

This antibody reacts with Rho A of mouse, rat and human origin by Western blotting, immunoprecipitation and immunohistochemistry.

Molecular weight of Rho A: 24 kDa. Western blotting positive control: HeLa cell lysate.

IMMUNOGEN

A peptid corresponding to amino acids 120-150 of human Rho A.

STORAGE

This antibody is stable for 12 months when stored at 2-8°C.

REFERENCES

1. Barbacid, M. 1987. ras genes. *Ann. Rev. Biochem.* 56: 779-827.
2. Olofsson, B., Chardin, P., Toudrot, N., Zahraoui, A., and Tavitian, A. 1988. Expression of the ras-related ral A rho 12 and rab genes in adult mouse tissues. *Oncogene* 3: 231-234.
3. Garrett, M.D., Self, A.J., Van Oers, C., and Hall, A. 1989. Identification of distinct cytoplasmic targets for ras/ R-ras and rho regulatory proteins. *J. Biol. Chem.* 264: 10-13.
4. Yeramian, P., Chardin, P., Madaule, P., and Tavitian, A. 1987. Nucleotide sequence of human rho cDNA clone 12. *Nucl. Acids Res.* 15: 189.
5. Adamson, P., Marshall, C.J., Hall, A., and Tilbrook, P.A. 1992. Post-translational modifications of p21rho proteins. *J. Biol. Chem.* 267: 20033-20038.
6. Cachero, T.G., Morielli, A.D. and Peralta, E.G. (1998) The small GTP-binding protein RhoA regulates a delayed rectifier potassium channel. *Cell* 93, 1077-1085.
7. Maekawa, M., Ishizaki, T., Boku, S., Watanabe, N., Fujita, A., Iwamatsu, A., Obinata, T., Ohashi, K., Mizuno, K. and Narumiya, S. (1999) Signaling from Rho to the actin cytoskeleton through protein kinases ROCK and LIM-kinase. *Science* 285, 895-898.
8. Ellerbroek, S.M., Wennerberg, K. and Burridge, K. (2003) Serine phosphorylation negatively regulates RhoA in vivo. *J. Biol. Chem.* 278, 19023-19031.
9. Wang, H.R., Zhang, Y., Ozdamar, B., Ogunjimi, A.A., Alexandrova, E., Thomsen, G.H. and Wrana, J.L. (2003) Regulation of cell polarity and protrusion formation by targeting RhoA for degradation. *Science* 302, 1775-1779.
10. McBeath, R., Pirone, D.M., Nelson, C.M., Bhadriraju, K. and Chen, C.S. (2004) Cell shape, cytoskeletal tension, and RhoA regulate stem cell lineage commitment. *Dev. Cell* 6, 483-495.
11. Li, Z., Dong, X., Wang, Z., Liu, W., Deng, N., Ding, Y., Tang, L., Hla, T., Zeng, R., Li, L. and Wu, D. (2005) Regulation of PTEN by Rho small GTPases. *Nat. Cell Biol.* 7, 399-404.

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