
Anti- Rsk-1

Cat #: HM1326
Rabbit polyclonal IgG
0.2 µg/µl, store at 4 °C

For research use only

BACKGROUND

The 90 kDa ribosomal S6 kinases (Rsk) are serine/threonine kinases that are important signaling intermediates in response to a broad range of ligand-activated receptor tyrosine kinases. Three Rsk (Rsk-1, Rsk-2 and Rsk-3) have been identified. They possess two non-identical complete kinase catalytic domains. Rsk phosphorylate various substrates, including members of the mitogen-activated kinase (MAPK) signaling pathway. They have been implicated in controlling cell growth and differentiation.

SPECIFICITY

This antibody specifically reacts with Rsk-1 of human, mouse and rat origin.

The antibody can be used in Western blotting, immunoprecipitation and immunohistochemistry.

Molecular Weight of Rsk-1: 83 kDa

Western blotting positive controls: HeLa

IMMUNOGEN

A synthetic peptide derived from N-terminus of human Rsk-1 protein.

STORAGE

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

REFERENCES

1. Kozma, S.C., Ferrari, S., Bassand, P., Siegmann, M., Totty, N., and Thomas, G. 1990. Cloning of the mitogen activated S6 kinase from rat liver reveals an enzyme of the second messenger subfamily. *Proc. Natl. Acad. Sci. USA* 87: 7365-7369.
2. Sweet, L.J., Alcorta, D.A., Jones, S.W., Erikson, E., and Erikson, R.L. 1990. Identification of mitogen-responsive ribosomal protein S6 kinase pp90rsk, a homolog of Xenopus S6 kinase II, in chicken embryo fibroblasts. *Mol. Cell. Biol.* 10: 2413-2417.
3. Moller, D.E., Xia, C.H., Tang, W., Zhu, A.X., and Jakubowski, M. 1994. Human rsk isoforms: cloning and characterization of tissue-specific expression. *Amer. J. Physiol.* 266: C351-C359.
4. Bjorbaek, C., Zhao, Y., and Moller, D.E. 1995. Divergent functional roles for p90rsk kinase domains. *J. Biol. Chem.* 270: 18848-18852.
5. Zhao, Y., Bjorbaek, C., Weremowicz, S., Morton, C.C., and Moller, D.E. 1995. RSK3 encodes a novel pp90rsk isoform with a unique N-terminal sequence: growth factor-stimulated kinase function and nuclear translocation. *Mol. Cell. Biol.* 15: 4353-4363.
6. Merienne, K., Jacquot, S., Zeniou, M., Pannetier, S., Sassone-Corsi, P., and Hanauer, A. (2000) Activation of RSK by UV-

light: phosphorylation dynamics and involvement of the MAPK pathway. *Oncogene* 19, 4221-4229.

7. Suzuki, T., Matsuda, S., Tsuzuku, J.K., Yoshida, Y. and Yamamoto, T. (2001) A serine/threonine kinase p90rsk1 phosphorylates the anti-proliferative protein Tob. *Genes Cells* 6, 131-138.
8. Roux, P.P., Richards, S.A. and Blenis, J. (2003) Phosphorylation of p90 ribosomal S6 kinase (RSK) regulates extracellular signal-regulated kinase docking and RSK activity. *Mol. Cell. Biol.* 23, 4796-4804.
9. Hu, Y., Fang, X., Dunham, S.M., Prada, C., Stachowiak, E.K. and Stachowiak, M.K. (2004) 90-kDa ribosomal S6 kinase is a direct target for the nuclear fibroblast growth factor receptor 1 (FGFR1): role in FGFR1 signaling. *J. Biol. Chem.* 279, 29325-29335.

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