

Rit. Mouse Monoclonal Antibody 14G7 , Human, Mouse

BACKGROUND

Rit and its neuron-specific homologue, Rin, define a recently discovered subfamily of Ras-related GTPases. Rit and Rin are membrane-associated in spite of the fact that they lack a CAAX box or similar C-terminal lipidation motif. Rit and Rin display 64% amino acid sequence identity and share a unique nine amino acid effector domain (DPTIEDAYK) that is 100% conserved between the murine and human proteins. Although the effector domain sequences of Rit and Rin are very similar to that of Ras, Rit and Rin have been shown to interact with the known Ras-binding proteins RaIGDS, RII and AF-6, but not the Raf kinases, RIN1 or the p110 subunit of PI3 kinase. For this reason, it has been suggested that Rit and Rin may play important roles in the regulation of signaling pathways distinct from those controlled by Ras.

ORDERING INFORMATION

CATALOG NUMBER
X1185M

SIZE
100 µg

FORM
Unconjugated

HOST/CLONE
Mouse Clone 14G7

FORMULATION
Provided as sterile filtered solution containing 20 mM sodium phosphate, 150 mM sodium chloride, 50% glycerol at pH 7.5 and 3 mM sodium azide

CONCENTRATION
1 mg/ml

ISOTYPE
IgG1

APPLICATIONS
Western Blot

IMMUNOGEN

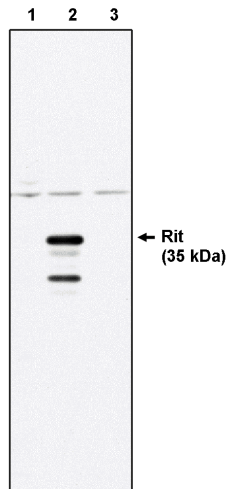
Hybridoma produced by the fusion of splenocytes from mice immunized with recombinant full-length human Rit protein and mouse myeloma cells.

SPECIES REACTIVITY

Human, Mouse

Legend:

Western blot analysis using Rit antibody (Cat. No. X1185M) on control 293 cells (1), 293 cells expressing HA-tagged Rit protein (2) and 293 cells expressing HA-tagged Rin protein (3).



For research use only. Not for use in human diagnostics or therapeutics.

POSITIVE CONTROL/TISSUE EXPRESSION**COMMENTS**

Antibody detects recombinant Rit protein expressed in 293 cells by Western blot analysis at a concentration of 0.5 to 1 $\mu\text{g/ml}$. Does not cross-react with Rin protein. Optimal concentration should be evaluated by serial dilutions.

SHIP CONDITIONS

Ship at ambient temperature, freeze upon arrival

STORAGE CUSTOMER

Product should be stored at -20°C . Aliquot to avoid freeze/thaw cycles

STABILITY

Products are stable for one year from purchase when stored properly

REFERENCES

1. Rusyn, E.V., et al. "Rit, a non-lipid-modified Ras-related protein, transforms NIH3T3 cells without activating the ERK, JNK, p38 MAPK or PI3K/Akt pathways." *Oncogene* 2000, 19, 4685-4694.
2. Lee, C.H. et al. "Rin, a neuron-specific and calmodulin-binding small G-protein, and Rit define a novel subfamily of ras proteins." *J. Neurosci.* 1996, 16, 6784-6794.
3. Shao, H., et al. "Biochemical characterization of the Ras-related GTPases Rit and Rin." *Arch. Biochem. Biophys.* 1999, 371, 207-219.

LAST MODIFIED 5/2/2008

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