

Rit2 (27G2): sc-58474

BACKGROUND

Ras-like expressed in many tissues (Rit) is a member of a subgroup within the larger Ras superfamily of small guanine triphosphatases (GTP-binding proteins). Rit contains a unique effector domain that is similar to same domain in the closely related RIN and *Drosophila* Ric proteins. Rit is involved in neuronal differentiation, development and regeneration by coupling specific trophic factor signals to sustained activation of the B-Raf/ERK and p38 MAP kinase cascades. Rit also appears to play a critical role in neurotrophin-mediated MAP kinase signaling and has modest transforming ability.

REFERENCES

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- Hynds, D.L., Spencer, M.L., Andres, D.A. and Snow, D.M. 2003. Rit promotes MEK-independent neurite branching in human neuroblastoma cells. *J. Cell Sci.* 116: 1925-1935.
- Shi, G.X. and Andres, D.A. 2005. Rit contributes to nerve growth factor-induced neuronal differentiation via activation of B-Raf-extracellular signal-regulated kinase and p38 mitogen-activated protein kinase cascades. *Mol. Cell. Biol.* 25: 830-846.
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CHROMOSOMAL LOCATION

Genetic locus: RIT2 (human) mapping to 18q12.3; Rit2 (mouse) mapping to 18 B1.

SOURCE

Rit2 (27G2) is a mouse monoclonal antibody raised against full length native Rit2 of human origin.

PRODUCT

Each vial contains 50 µg IgG_{2b} in 0.5 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 1% glycerol.

APPLICATIONS

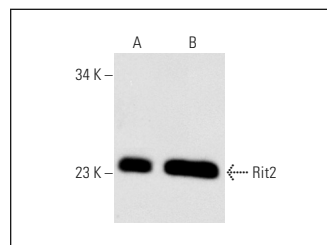
Rit2 (27G2) is recommended for detection of Rit2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Rit2 siRNA (h): sc-62950, Rit2 siRNA (m): sc-62951, Rit2 shRNA Plasmid (h): sc-62950-SH, Rit2 shRNA Plasmid (m): sc-62951-SH, Rit2 shRNA (h) Lentiviral Particles: sc-62950-V and Rit2 shRNA (m) Lentiviral Particles: sc-62951-V.

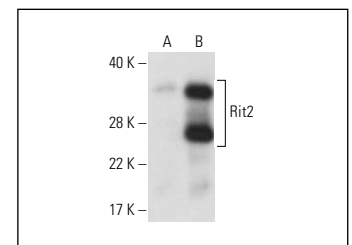
Molecular Weight of Rit2: 25 kDa.

Positive Controls: SK-N-SH cell lysate: sc-2410.

DATA



Rit2 (27G2): sc-58474. Western blot analysis of Rit2 expression in 293T (A) and SK-N-SH (B) whole cell lysates.



Rit2 (27G2): sc-58474. Western blot analysis of Rit2 expression in Rit2 transfected (A) and Rit2 transfected (B) whole cell lysates.

SELECT PRODUCT CITATIONS

- Uenaka, T., Satake, W., Cha, P.C., Hayakawa, H., Baba, K., Jiang, S., Kobayashi, K., Kanagawa, M., Okada, Y., Mochizuki, H. and Toda, T. 2018. In silico drug screening by using genome-wide association study data repurposed dabrafenib, an anti-melanoma drug, for Parkinson's disease. *Hum. Mol. Genet.* 27: 3974-3985.
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STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.