

# RSU1 (Y-24): sc-133979

## BACKGROUND

RSU1 (Ras suppressor protein 1), also known as RSP1, is a 277 amino acid protein that is highly conserved and ubiquitously expressed in mammalian cells. RSU1 contains 7 LRR (leucine-rich) repeats which are responsible for the protein-binding function of RSU1. RSU1 may play a role in the Ras signal transduction pathway, as well as in growth inhibition and in the nerve-growth factor-induced differentiation processes. It has been suggested that RSU1 is capable of suppressing v-Ras transformation in mice. RSU1 binds to the LIM 5 domain of Pinch-1 (particularly interesting new Cys-His protein 1) and colocalizes to focal adhesions of cells. There are multiple alternatively spliced transcript variants that exist, one of which is found only in glioma tumors.

## REFERENCES

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3. Masuelli, L. and Cutler, M.L. 1996. Increased expression of the Ras suppressor RSU1 enhances ERK 2 activation and inhibits Jun kinase activation. *Mol. Cell. Biol.* 16: 5466-5476.
4. Masuelli, L., Ettenberg, S., Vasaturo, F., Vestergaard-Sykes, K. and Cutler, M.L. 1999. The ras suppressor, RSU1, enhances nerve growth factor-induced differentiation of PC12 cells and induces p21CIP expression. *Cell Growth Differ.* 10: 555-564.
5. Vasaturo, F., Dougherty, G.W. and Cutler, M.L. 2000. Ectopic expression of RSU1 results in elevation of p21CIP and inhibits anchorage-independent growth of MCF7 breast cancer cells. *Breast Cancer Res. Treat.* 61: 69-78.
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7. Kadrmas, J.L., Smith, M.A., Clark, K.A., Pronovost, S.M., Muster, N., Yates, J.R. and Beckerle, M.C. 2004. The integrin effector Pinch regulates JNK activity and epithelial migration in concert with Ras suppressor 1. *J. Cell Biol.* 167: 1019-1024.

## CHROMOSOMAL LOCATION

Genetic locus: RSU1 (human) mapping to 10p13; Rsu1 (mouse) mapping to 2 A1.

## SOURCE

RSU1 (Y-24) is a Protein A purified rabbit polyclonal antibody raised against synthetic RSU1 peptide of human origin.

## RESEARCH USE

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

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## APPLICATIONS

RSU1 (Y-24) is recommended for detection of RSU1 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

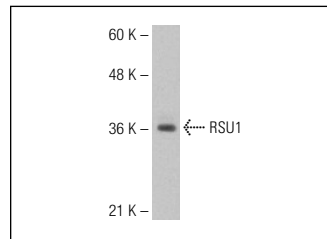
Suitable for use as control antibody for RSU1 siRNA (h): sc-90735, RSU1 siRNA (m): sc-153162, RSU1 shRNA Plasmid (h): sc-90735-SH, RSU1 shRNA Plasmid (m): sc-153162-SH, RSU1 shRNA (h) Lentiviral Particles: sc-90735-V and RSU1 shRNA (m) Lentiviral Particles: sc-153162-V.

Molecular Weight of truncated RSU1: 29 kDa.

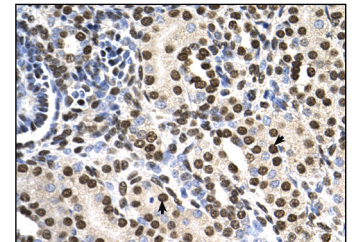
Molecular Weight of full-length RSU1: 33 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

## DATA



RSU1 (Y-24): sc-133979. Western blot analysis of RSU1 expression in Jurkat whole cell lysate.



RSU1 (Y-24): sc-133979. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human kidney tissue showing nuclear and cytoplasmic localization.

## STORAGE

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

## PROTOCOLS

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Try **RSU1 (1C6): sc-517140**, our highly recommended monoclonal alternative to RSU1 (Y-24).