## BACKGROUND

RUSC2 (RUN and SH3 domain containing 2), also known as Iporin, is a 1,516 amino acid cytoplasmic protein that is widely expressed, with highest levels in brain and testis. The RUN domain of RUSC2 is required for interaction with Rab 1A, Rab 1B and GM130. It is thought that RUSC2 may possibly function as a connector between endoplasmic reticulum (ER) derived vesicle targets triggered by the Rab 1 GTPases and a signaling pathway regulated by molecules containing SH3 and/or poly-proline regions. RUSC2 also consists of a SH3 domain, suggesting a role in protein-protein interactions. RUSC2 is encoded by a gene located human chromosome 9, which houses over 900 genes and comprises nearly $4 \%$ of the human genome. Hereditary hemorrhagic telangiectasia, which is characterized by harmful vascular defects, and Familial dysautonomia, are both associated with chromosome 9. Notably, chromosome 9 encompasses the largest interferon family gene cluster.

## REFERENCES

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2. Humphray, S.J., et al. 2004. DNA sequence and analysis of human chromosome 9. Nature 429: 369-374.
3. Bayer, M., et al. 2005. Identification and characterization of Iporin as a novel interaction partner for Rab1. BMC Cell Biol. 6: 15.
4. Coppo, P., et al. 2006. BCR-ABL activates STAT3 via JAK and MEK pathways in human cells. Br. J. Haematol. 134: 171-179.
5. Cottin, V., et al. 2007. Pulmonary vascular manifestations of hereditary hemorrhagic telangiectasia (Rendu-Osler disease). Respiration 74: 361-378.
6. Hernandez-L, A., et al. 2007. Gene expression fingerprinting for human hereditary hemorrhagic telangiectasia. Hum. Mol. Genet. 16: 1515-1533
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## CHROMOSOMAL LOCATION

Genetic locus: RUSC2 (human) mapping to 9p13.3.

## SOURCE

RUSC2 (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C -terminus of RUSC2 of human origin.

## PRODUCT

Each vial contains $200 \mu \mathrm{ggG}$ in 1.0 ml of PBS with $<0.1 \%$ sodium azide and $0.1 \%$ gelatin.
Blocking peptide available for competition studies, sc-160759 P, ( $100 \mu \mathrm{~g}$ peptide in 0.5 ml PBS containing $<0.1 \%$ sodium azide and $0.2 \% \mathrm{BSA})$.

## RESEARCH USE

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

## APPLICATIONS

RUSC2 (C-15) is recommended for detection of RUSC2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with RUSC1.
RUSC2 (C-15) is also recommended for detection of RUSC2 in additional species, including porcine.
Suitable for use as control antibody for RUSC2 siRNA (h): sc-92958, RUSC2 shRNA Plasmid (h): sc-92958-SH and RUSC2 shRNA (h) Lentiviral Particles: sc-92958-V.
Molecular Weight of RUSC2: 161 kDa .

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat lgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz MarkerTM Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:1001:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## STORAGE

Store at $4^{\circ} \mathrm{C}$, **DO NOT FREEZE ${ }^{* *}$. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PROTOCOLS

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

