

ARHGAP28 (S-14): sc-84698

BACKGROUND

ARHGAP28 (Rho GTPase activating protein 28), also known as KIAA1314, is a 729 amino acid protein that contains one helical Rho-GAP domain. Expressed at moderate levels in ovary and kidney and at lower levels in skeletal muscle and spleen, ARHGAP28 functions as a negative regulator of Rho-type GTPases, specifically catalyzing the conversion of the target GTPase to an inactive, GDP-bound state. ARHGAP28, which exists as four alternatively spliced isoforms, is subject to DNA damaged-induced phosphorylation, possibly by ATM or ATR. The gene encoding ARHGAP28 localizes to human chromosome 18, which houses over 300 protein-coding genes and contains nearly 76 million bases. There are a variety of diseases associated with defects in chromosome 18-localized genes, some of which include trisomy 18 (also known as Edwards syndrome), Niemann-Pick disease, hereditary hemorrhagic telangiectasia, erythropoietic protoporphyria and follicular lymphomas.

REFERENCES

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5. Katoh, M. and Katoh, M. 2004. Identification and characterization of ARHGAP24 and ARHGAP25 genes in silico. *Int. J. Mol. Med.* 14: 333-338.
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8. Aurizi, C., et al. 2007. Heterogeneity of mutations in the ferrochelatase gene in Italian patients with erythropoietic protoporphyria. *Mol. Genet. Metab.* 90: 402-407.
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CHROMOSOMAL LOCATION

Genetic locus: ARHGAP28 (human) mapping to 18p11.31; Arhgap28 (mouse) mapping to 17 E1.2.

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.

SOURCE

ARHGAP28 (S-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of ARHGAP28 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-84698 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ARHGAP28 (S-14) is recommended for detection of ARHGAP28 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with ARHGAP10 and ARHGAP21.

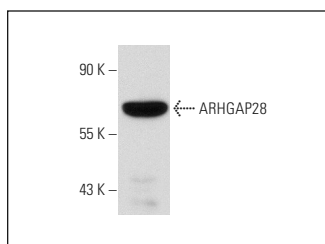
RHGAP28 (S-14) is also recommended for detection of ARHGAP28 in additional species, including equine.

Suitable for use as control antibody for ARHGAP28 siRNA (h): sc-72534, ARHGAP28 siRNA (m): sc-141214, ARHGAP28 shRNA Plasmid (h): sc-72534-SH, ARHGAP28 shRNA Plasmid (m): sc-141214-SH, ARHGAP28 shRNA (h) Lentiviral Particles: sc-72534-V and ARHGAP28 shRNA (m) Lentiviral Particles: sc-141214-V.

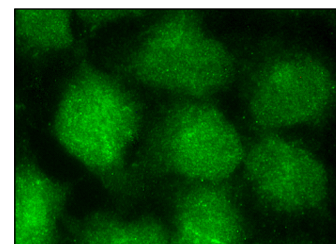
Molecular Weight of ARHGAP28 isoforms: 62-77 kDa.

Positive Controls: NTERA-2 cl.D1 whole cell lysate: sc-364181 or human fetal lung tissue extract.

DATA



ARHGAP28 (S-14): sc-84698. Western blot analysis of ARHGAP28 expression in NTERA-2 cl.D1 whole cell lysate.



ARHGAP28 (S-14): sc-84698. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear and cytoplasmic localization.

PROTOCOLS

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