

ARRDC1 (S-13): sc-135437

BACKGROUND

ARRDC1, ARRDC2 (which exists as multiple alternatively spliced isoforms), ARRDC4 and ARRDC5 are arrestin domain-containing proteins that are encoded by genes which map to human chromosomes 9, 15 and 19. Chromosome 9, on which the ARRDC1 gene is localized, contains 145 million base pairs and comprises 4% of the human genome, encoding nearly 900 genes. 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. The ARRDC2 and ARRDC5 genes map to chromosome 19, which consists of over 63 million bases, houses approximately 1,400 genes and is recognized for having the greatest gene density of the human chromosomes. Unlike other ARRDC genes, the ARRDC4 gene maps to human chromosome 15, which houses over 700 genes and comprises nearly 3% of the human genome. Angelman syndrome, Prader-Willi syndrome, Tay-Sachs disease and Marfan syndrome are all associated with defects in chromosome 15-localized genes.

REFERENCES

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- Moodie, S.J., et al. 2002. Analysis of candidate genes on chromosome 19 in coeliac disease: an association study of the KIR and LILR gene clusters. *Eur. J. Immunogenet.* 29: 287-291.
- Temtamy, S.A., et al. 2007. Phenotypic and cytogenetic spectrum of 9p trisomy. *Genet. Couns.* 18: 29-48.
- Diene, G., et al. 2007. The Prader-Willi syndrome. *Ann. Endocrinol.* 68: 129-137.

CHROMOSOMAL LOCATION

Genetic locus: ARRDC1 (human) mapping to 9q34.3; Arrdc1 (mouse) mapping to 2 A3.

SOURCE

ARRDC1 (S-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of ARRDC1 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-135437 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

ARRDC1 (S-13) is recommended for detection of ARRDC1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other ARRDC family members.

ARRDC1 (S-13) is also recommended for detection of ARRDC1 in additional species, including equine, canine and bovine.

Suitable for use as control antibody for ARRDC1 siRNA (h): sc-92497, ARRDC1 siRNA (m): sc-141272, ARRDC1 shRNA Plasmid (h): sc-92497-SH, ARRDC1 shRNA Plasmid (m): sc-141272-SH, ARRDC1 shRNA (h) Lentiviral Particles: sc-92497-V and ARRDC1 shRNA (m) Lentiviral Particles: sc-141272-V.

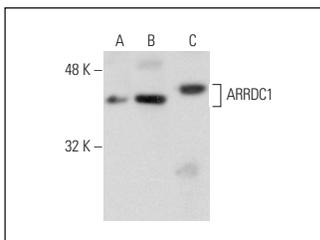
Molecular Weight of ARRDC1: 46 kDa.

Positive Controls: ARRDC1 (h): 293T Lysate: sc-114848 or PC-3 cell lysate: sc-2220.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



ARRDC1 (S-13): sc-135437. Western blot analysis of ARRDC1 expression in non-transfected 293T: sc-117752 (A), human ARRDC1 transfected 293T: sc-114848 (B) and PC-3 (C) whole cell lysates.

STORAGE

Store at 4° 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.