ARRDC5 (P-14): sc-135449



The Power to Question

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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- Chen, Z., et al. 2002. Agonist-induced internalization of the platelet-activating factor receptor is dependent on arrestins but independent of G-protein activation. Role of the C terminus and the (D/N)PXXY motif. J. Biol. Chem. 277: 7356-7362.
- 3. 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.
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- Diene, G., et al. 2007. The Prader-Willi syndrome. Ann. Endocrinol. 68: 129-137.
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CHROMOSOMAL LOCATION

Genetic locus: ARRDC5 (human) mapping to 19p13.3; Arrdc5 (mouse) mapping to 17 D.

SOURCE

ARRDC5 (P-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of ARRDC5 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-135449 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ARRDC5 (P-14) is recommended for detection of ARRDC5 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 .

ARRDC5 (P-14) is also recommended for detection of ARRDC5 in additional species, including canine and bovine.

Suitable for use as control antibody for ARRDC5 siRNA (h): sc-108094, ARRDC5 siRNA (m): sc-141276, ARRDC5 shRNA Plasmid (h): sc-108094-SH, ARRDC5 shRNA Plasmid (m): sc-141276-SH, ARRDC5 shRNA (h) Lentiviral Particles: sc-108094-V and ARRDC5 shRNA (m) Lentiviral Particles: sc-141276-V.

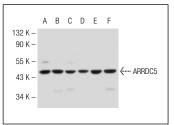
Molecular Weight of ARRDC5: 37 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, A549 cell lysate: sc-2413 or MCF7 whole cell lysate: sc-2206.

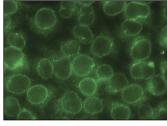
RECOMMENDED SECONDARY REAGENTS

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



ARRDC5 (P-14): sc-135449. Western blot analysis of ARRDC5 expression in HeLa (A), A549 (B), MCF7 (C), SW480 (D), K-562 (E) and H69AR (F) whole cell lysates.



ARRDC5 (P-14): sc-135449. Immunofluorescence staining of methanol-fixed HeLa cells showing perinuclear localization.

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.