

# ARRDC1 (E-6): sc-398652

## 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

- Orsini, M.J. and Benovic, J.L. 1998. Characterization of dominant negative arrestins that inhibit  $\beta_2$ -adrenergic receptor internalization by distinct mechanisms. *J. Biol. Chem.* 273: 34616-34622.
- 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.
- 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.

## CHROMOSOMAL LOCATION

Genetic locus: ARRDC1 (human) mapping to 9q34.3.

## SOURCE

ARRDC1 (E-6) is a mouse monoclonal antibody raised against amino acids 1-98 mapping at the N-terminus of ARRDC1 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

ARRDC1 (E-6) is available conjugated to agarose (sc-398652 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398652 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398652 PE), fluorescein (sc-398652 FITC), Alexa Fluor® 488 (sc-398652 AF488), Alexa Fluor® 546 (sc-398652 AF546), Alexa Fluor® 594 (sc-398652 AF594) or Alexa Fluor® 647 (sc-398652 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398652 AF680) or Alexa Fluor® 790 (sc-398652 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## APPLICATIONS

ARRDC1 (E-6) is recommended for detection of ARRDC1 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

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

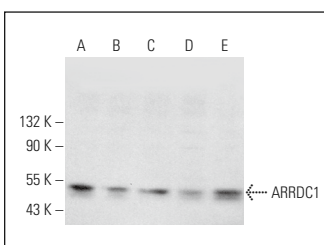
Molecular Weight of ARRDC1: 46 kDa.

Positive Controls: ARRDC1 (h): 293T Lysate: sc-114848, PC-3 cell lysate: sc-2220 or K-562 whole cell lysate: sc-2203.

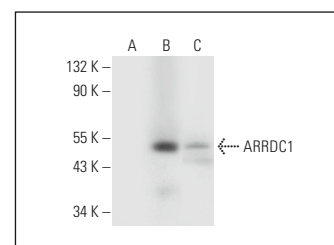
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



ARRDC1 (E-6): sc-398652. Western blot analysis of ARRDC1 expression in K-562 (A), HEL 92.1.7 (B), T-47D (C), TF-1 (D) and HL-60 (E) whole cell lysates.



ARRDC1 (E-6): sc-398652. 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.

## SELECT PRODUCT CITATIONS

- Hou, P.P., et al. 2020. Ectosomal PKM2 promotes HCC by inducing macrophage differentiation and remodeling the tumor microenvironment. *Mol. Cell* 78: 1192-1206.e10.

## 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.