

# ARRDC3 (E-14): sc-135442

## BACKGROUND

ARRDC3 (arrestin domain containing 3), also known as TLIMP, is a 414 amino acid protein that belongs to the arrestin family and is encoded by a gene which maps to human chromosome 5. With 181 million base pairs encoding around 1,000 genes, chromosome 5 comprises over 6% of human genomic DNA. Chromosome 5 is associated with Cockayne syndrome through the ERCC8 gene, as well as with familial adenomatous polyposis through the adenomatous polyposis coli (APC) tumor suppressor gene. Treacher Collins syndrome is also chromosome 5-associated and is caused by insertions or deletions within the TCOF1 gene. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome, while deletion of 5q or chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

## REFERENCES

- Dixon, M.J., et al. 1991. The gene for Treacher Collins syndrome maps to the long arm of chromosome 5. *Am. J. Hum. Genet.* 49: 17-22.
- Joslyn, G., et al. 1991. Identification of deletion mutations and three new genes at the familial polyposis locus. *Cell* 66: 601-613.
- Kinzler, K.W., et al. 1991. Identification of FAP locus genes from chromosome 5q21. *Science* 253: 661-665.
- Nishisho, I., et al. 1991. Mutations of chromosome 5q21 genes in FAP and colorectal cancer patients. *Science* 253: 665-669.
- Prieschl, E.E., et al. 1996. The murine homolog of TB2/DP1, a gene of the familial adenomatous polyposis (FAP) locus. *Gene* 169: 215-218.
- Nagase, T., et al. 2000. Prediction of the coding sequences of unidentified human genes. XVI. The complete sequences of 150 new cDNA clones from brain which code for large proteins *in vitro*. *DNA Res.* 7: 65-73.
- Oka, S., et al. 2006. Thioredoxin-binding protein-2-like inducible membrane protein is a novel vitamin D3 and peroxisome proliferator-activated receptor (PPAR) $\gamma$  ligand target protein that regulates PPAR $\gamma$  signaling. *Endocrinology* 147: 733-743.

## CHROMOSOMAL LOCATION

Genetic locus: ARRDC3 (human) mapping to 5q14.3; Arrdc3 (mouse) mapping to 13 C3.

## SOURCE

ARRDC3 (E-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of ARRDC3 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-135442 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ARRDC3 (E-14) is recommended for detection of ARRDC3 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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.

ARRDC3 (E-14) is also recommended for detection of ARRDC3 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ARRDC3 siRNA (h): sc-92033, ARRDC3 siRNA (m): sc-141274, ARRDC3 shRNA Plasmid (h): sc-92033-SH, ARRDC3 shRNA Plasmid (m): sc-141274-SH, ARRDC3 shRNA (h) Lentiviral Particles: sc-92033-V and ARRDC3 shRNA (m) Lentiviral Particles: sc-141274-V.

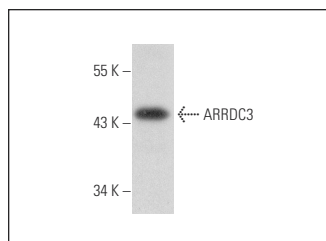
Molecular Weight of ARRDC3: 46 kDa.

Positive Controls: rat liver extract: sc-2395.

## 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<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

## DATA



ARRDC3 (E-14): sc-135442. Western blot analysis of ARRDC3 expression in rat liver tissue extract.

## STORAGE

Store at 4 $^{\circ}$  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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.