SANTA CRUZ BIOTECHNOLOGY, INC.

ARRDC3 (C-14): sc-135441



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 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

REFERENCES

- Dixon, M.J., Read, A.P., Donnai, D., Colley, A., Dixon, J. and Williamson, R. 1991. The gene for Treacher Collins syndrome maps to the long arm of chromosome 5. Am. J. Hum. Genet. 49: 17-22.
- Joslyn, G., Carlson, M., Thliveris, A., Albertsen, H., Gelbert, L., Samowitz, W., Groden, J., Stevens, J., Spirio, L. and Robertson, M. 1991. Identification of deletion mutations and three new genes at the familial polyposis locus. Cell 66: 601-613.
- Kinzler, K.W., Nilbert, M.C., Su, L.K., Vogelstein, B., Bryan, T.M., Levy, D.B., Smith, K.J., Preisinger, A.C., Hedge, P. and McKechnie, D. 1991. Identification of FAP locus genes from chromosome 5q21. Science 25: 661-665.
- Nishisho, I., Nakamura, Y., Miyoshi, Y., Miki, Y., Ando, H., Horii, A., Koyama, K., Utsunomiya, J., Baba, S. and Hedge, P. 1991. Mutations of chromosome 5q21 genes in FAP and colorectal cancer patients. Science 253: 665-669.
- Prieschl, E.E., Pendl, G.G., Harrer, N.E. and Baumruker, T. 1996. The murine homolog of TB2/DP1, a gene of the familial adenomatous polyposis (FAP) locus. Gene 169: 215-218.
- Nagase, T., Kikuno, R., Ishikawa, K.I., Hirosawa, M. and Ohara, O. 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.
- Shin, S.M., Chung, Y.J., Oh, S.T., Jeon, H.M., Hwang, L.J., Namkoong, H., Kim, H.K., Cho, G.W., Hur, S.Y., Kim, T.E., Lee, Y.S., Park, Y.G., Ko, J. and Kim, J.W. 2006. HCCR-1-interacting molecule "deleted in polyposis 1" plays a tumor-suppressor role in colon carcinogenesis. Gastroenterology 130: 2074-2086.
- Oka, S., Masutani, H., Liu, W., Horita, H., Wang, D., Kizaka-Kondoh, S. and Yodoi, J. 2006. Thioredoxin-binding protein-2-like inducible membrane protein is a novel vitamin D3 and peroxisome proliferator-activated receptor (PPAR)γ ligand target protein that regulates PPARγ signaling. Endocrinology 147: 733-743.

CHROMOSOMAL LOCATION

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

SOURCE

ARRDC3 (C-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of ARRDC3 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-135441 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ARRDC3 (C-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), 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 (C-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.

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) Immunofluo-rescence: 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.

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.

PROTOCOLS

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