

# ANKRD9 (C-13): sc-137295

## BACKGROUND

Ankyrins are membrane adaptor molecules that play important roles in coupling integral membrane proteins to the spectrin-based cytoskeleton network. Mutations of ankyrin genes lead to severe genetic diseases, such as fatal cardiac arrhythmias and hereditary spherocytosis. ANKRD9 (ankyrin repeat domain 9) is a 317 amino acid protein that contains three ANK repeats. Encoded by a gene that maps to human chromosome 14q32.31, ANKRD9 is conserved in chimpanzee, dog, cow, mouse, rat and zebrafish. Hepatic mRNA levels of ANKRD9 are repressed by both thyroid hormone (T3) and fasting, and re-elevate by feeding after fasting. ANKRD9 mRNA levels also decrease in response to apoptosis. Localizing to cytoplasm, ANKRD9 may be involved in intracellular lipid accumulation and lipid metabolism. ANKRD9 may also function as a molecular chaperone.

## REFERENCES

1. Buckanovich, R.J., Sasaroli, D., O'Brien-Jenkins, A., Botbyl, J., Hammond, R., Katsaros, D., Sandaltzopoulos, R., Liotta, L.A., Gimotty, P.A. and Coukos, G. 2007. Tumor vascular proteins as biomarkers in ovarian cancer. *J. Clin. Oncol.* 25: 852-861.
2. Christensen, E.I., Raciti, D., Reggiani, L., Verroust, P.J. and Brändli, A.W. 2008. Gene expression analysis defines the proximal tubule as the compartment for endocytic receptor-mediated uptake in the *Xenopus* pronephric kidney. *Pflugers Arch.* 456: 1163-1176.
3. Wang, X., Newkirk, R.F., Carre, W., Ghose, P., Igobudia, B., Townsel, J.G. and Cogburn, L.A. 2009. Regulation of ANKRD9 expression by lipid metabolic perturbations. *BMB Rep.* 42: 568-573.
4. Deng, Y., Liu, B., Fan, X., Wang, Y., Tang, M., Mo, X., Li, Y., Ying, Z., Wan, Y., Luo, N., Zhou, J., Wu, X. and Yuan, W. 2010. ZNF552, a novel human KRAB/C<sub>2</sub>H<sub>2</sub> zinc finger protein, inhibits AP-1- and SRE-mediated transcriptional activity. *BMB Rep.* 43: 193-198.
5. Deng, Y., Li, Y., Fan, X., Yuan, W., Xie, H., Mo, X., Yan, Y., Zhou, J., Wang, Y., Ye, X., Wan, Y. and Wu, X. 2010. Synergistic efficacy of LBH and  $\alpha$ B-crystallin through inhibiting transcriptional activities of p53 and p21. *BMB Rep.* 43: 432-437.

## CHROMOSOMAL LOCATION

Genetic locus: ANKRD9 (human) mapping to 14q32.31; Ankrd9 (mouse) mapping to 12 F1.

## SOURCE

ANKRD9 (C-13) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of ANKRD9 of human origin.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

## 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-137295 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ANKRD9 (C-13) is recommended for detection of ANKRD9 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 ANKRD family members.

Suitable for use as control antibody for ANKRD9 siRNA (h): sc-92257, ANKRD9 siRNA (m): sc-141118, ANKRD9 shRNA Plasmid (h): sc-92257-SH, ANKRD9 shRNA Plasmid (m): sc-141118-SH, ANKRD9 shRNA (h) Lentiviral Particles: sc-92257-V and ANKRD9 shRNA (m) Lentiviral Particles: sc-141118-V.

Molecular Weight of ANKRD9: 34 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) 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.

## RESEARCH USE

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