# ANKRD12 (G-24): sc-130952



The Power to Question

#### **BACKGROUND**

ANKRD12 (ankyrin repeat domain 12), also known as ANCO2 (ankyrin repeat-containing cofactor 2), is a 2,062 amino acid protein that localizes to the nucleus and contains three ANK repeats. Expressed as two alternatively spliced isoforms that are present at moderate levels in lung, brain, heart, kidney, liver and testis, ANKRD12 interacts with p160 coactivators and is thought to recruit HDACs (histone deacetylases) to p160 complexes, thereby inhibiting ligand-dependent transactivation. The gene encoding ANKRD12 localizes to human chromosome 18, which houses over 300 protein-coding genes and contains nearly 76 million bases. There are a variety of diseases associated with defects in chromosome 18-localized genes, some of which include Trisomy 18 (also known as Edwards syndrome), Niemann-Pick disease, hereditary hemorrhagic telangiectasia, erythropoietic protoporphyria and follicular lymphomas.

## **REFERENCES**

- Carstea, E.D., Polymeropoulos, M.H., Parker, C.C., Detera-Wadleigh, S.D., O'Neill, R.R., Patterson, M.C., Goldin, E., Xiao, H., Straub, R.E. and Vanier, M.T. 1993. Linkage of Niemann-Pick disease type C to human chromosome 18. Proc. Natl. Acad. Sci. USA 90: 2002-2004.
- Nagase, T., Ishikawa, K., Suyama, M., Kikuno, R., Hirosawa, M., Miyajima, N., Tanaka, A., Kotani, H., Nomura, N. and Ohara, O. 1998. Prediction of the coding sequences of unidentified human genes. XII. The complete sequences of 100 new cDNA clones from brain which code for large proteins *in vitro*. DNA Res. 5: 355-364.
- 3. Zhang, A., Yeung, P.L., Li, C.W., Tsai, S.C., Dinh, G.K., Wu, X., Li, H. and Chen, J.D. 2004. Identification of a novel family of ankyrin repeats containing cofactors for p160 nuclear receptor coactivators. J. Biol. Chem. 279: 33799-33805.
- Tompkins, V., Hagen, J., Zediak, V.P. and Quelle, D.E. 2006. Identification of novel ARF binding proteins by two-hybrid screening. Cell Cycle 5: 641-646.
- 5. Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 610616. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Li, C.W., Dinh, G.K., Zhang, A. and Chen, J.D. 2008. Ankyrin repeatscontaining cofactors interact with ADA3 and modulate its co-activator function. Biochem. J. 413: 349-357.

# **CHROMOSOMAL LOCATION**

Genetic locus: ANKRD12 (human) mapping to 18p11.22; Ankrd12 (mouse) mapping to 17 E1.1.

# **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 or our catalog for detailed protocols and support products.

#### **SOURCE**

ANKRD12 (G-24) is a Protein A purified rabbit polyclonal antibody raised against synthetic ANKRD12 peptide of human origin.

#### **PRODUCT**

Each vial contains 100  $\mu$ g IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

#### **APPLICATIONS**

ANKRD12 (G-24) is recommended for detection of ANKRD12 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ANKRD12 siRNA (h): sc-72497, ANKRD12 siRNA (m): sc-141074, ANKRD12 shRNA Plasmid (h): sc-72497-SH, ANKRD12 shRNA Plasmid (m): sc-141074-SH, ANKRD12 shRNA (h) Lentiviral Particles: sc-72497-V and ANKRD12 shRNA (m) Lentiviral Particles: sc-141074-V.

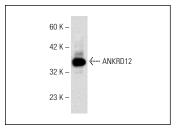
Molecular Weight of ANKRD12: 37 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

## **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).

## **DATA**



ANKRD12 (G-24): sc-130952. Western blot analysis of ANKRD12 expression in Hep G2 whole cell lysate.

## **RESEARCH USE**

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