SANTA CRUZ BIOTECHNOLOGY, INC.

ANKMY2 (N-12): sc-138102

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

ANKMY2 (ankyrin repeat and MYND domain containing 2) is a 441 amino acid protein that contains 3 ANK repeats and one MYND-type zinc finger. Encoded by a gene that maps to human chromosome 7p21.1, ANKMY2 is conserved in chimpanzee, canine, bovine, mouse, chicken, zebrafish, fruit fly, mosquito and *Caenorhabditis elegans*. Downregulation of ANKMY2, associated with frequent deletions of human chromosome 7p22.1, indicate that ANKMY2 may role a role in the pathogenesis of natural killer (NK)-cell malignancies. ANKMY2 is also upregulated by enforced expression of Hox11, which functions broadly to hinder hemopoiesis, diverts differentiation to an alternative fate and promotes pre-leukaemic states. ANKMY2 may also participate in zinc ion binding, cell adhesion, cellular morphogenesis, neurite outgrowth and human cortical functions.

REFERENCES

1. Oldham, M.C., et al. 2006. Conservation and evolution of gene coexpression networks in human and chimpanzee brains. Proc. Natl. Acad. Sci. USA 103: 17973-17978.
2. Dixon, D.N., et al. 2007. TLX1/HOX11 transcription factor inhibits differentiation and promotes a non-haemopoietic phenotype in murine bone marrow cells. Br. J. Haematol. 138: 54-67.
3. Hesson, L.B., et al. 2007. Evaluation of the 3p21.3 tumour-suppressor gene cluster. Oncogene 26: 7283-7301.
4. Mahler, K.L., et al. 2008. Sequence divergence of Mus spretus and Mus musculus across a skin cancer susceptibility locus. BMC Genomics 9: 626.
5. Delplanque, J., et al. 2008. Slowly progressive spinocerebellar ataxia with extrapyramidal signs and mild cognitive impairment (SCA21). Cerebellum 7: 179-183.
6. Haider, N.B., et al. 2009. Nr2e3-directed transcriptional regulation of genes involved in photoreceptor development and cell-type specific phototransduction. Exp. Eye Res. 89: 365-372.

CHROMOSOMAL LOCATION

Genetic locus: ANKMY2 (human) mapping to 7p21.1; Ankmy2 (mouse) mapping to 12 A3.

SOURCE

ANKMY2 (N-12) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of ANKMY2 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-138102 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

ANKMY2 (N-12) is recommended for detection of ANKMY2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg 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 ANKMY1.

Suitable for use as control antibody for ANKMY2 siRNA (h): sc-89542, ANKMY2 siRNA (m): sc-141072, ANKMY2 shRNA Plasmid (h): sc-89542-SH, ANKMY2 shRNA Plasmid (m): sc-141072-SH, ANKMY2 shRNA (h) Lentiviral Particles: sc-89542-V and ANKMY2 shRNA (m) Lentiviral Particles: sc-141072-V.

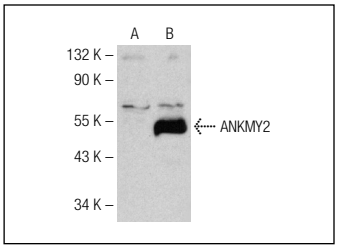
Molecular Weight of ANKMY2: 49 kDa.

Positive Controls: ANKMY2 (h3): 293T Lysate: sc-114360.

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). 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™ Mounting Medium: sc-24941.

DATA



ANKMY2 (N-12): sc-138102. Western blot analysis of ANKMY2 expression in non-transfected: sc-117752 (**A**) and human ANKMY2 transfected: sc-114360 (**B**) 293T whole cell lysates.

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.