

# ANKMY2 (T-12): sc-138103

## 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 play 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 (T-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-138103 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 (T-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.

ANKMY2 (T-12) is also recommended for detection of ANKMY2 in additional species, including equine, canine, bovine and porcine.

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.

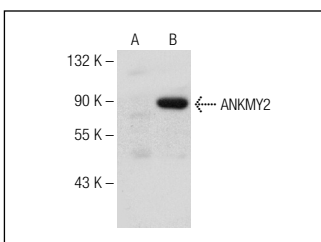
Molecular Weight of ANKMY2: 49 kDa.

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 (T-12): sc-138103. 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](http://www.scbt.com) or our catalog for detailed protocols and support products.