

ANKMY1 (h4): 293T Lysate: sc-114400

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. ANKMY1 (ankyrin repeat and MYND domain containing 1), also known as ZMYND13 or TSAL1, is a 941 amino acid protein that contains seven ANK repeats, three MORN repeats and one MYND-type zinc finger. MORN repeats were first identified in junctophilins, cytoplasmic proteins involved in junctions between the plasma membrane and the ER/SR membrane. The presence of MORN repeats suggests that ANKMY1 may interact with the plasma membrane. The MYND domain consists of a cluster of cysteine and histidine residues, arranged with an invariant spacing to form a potential zinc-binding motif which may be involved in protein-protein interactions. Three isoforms of ANKMY1 exist due to alternative splicing events.

REFERENCES

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2. Koide, A., Bailey, C.W., Huang, X. and Koide, S. 1998. The fibronectin type III domain as a scaffold for novel binding proteins. *J. Mol. Biol.* 284: 1141-1151.
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4. Ma, H., Lou, Y., Lin, W.H. and Xue, H.W. 2006. MORN motifs in plant PIPs are involved in the regulation of subcellular localization and phospholipid binding. *Cell Res.* 16: 466-478.
5. Hopitzan, A.A., Baines, A.J. and Kordeli, E. 2006. Molecular evolution of ankyrin: gain of function in vertebrates by acquisition of an Obscurin/Titin-binding-related domain. *Mol. Biol. Evol.* 23: 46-55.
6. Cai, X. and Zhang, Y. 2006. Molecular evolution of the ankyrin gene family. *Mol. Biol. Evol.* 23: 550-558.
7. Mecklenburg, K.L. 2007. Drosophila retinophilin contains MORN repeats and is conserved in humans. *Mol. Genet. Genomics* 277: 481-489.

CHROMOSOMAL LOCATION

Genetic locus: ANKMY1 (human) mapping to 2q37.3.

PRODUCT

ANKMY1 (h4): 293T Lysate represents a lysate of human ANKMY1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

ANKMY1 (h4): 293T Lysate is suitable as a Western Blotting positive control for human reactive ANKMY1 antibodies. Recommended use: 10-20 µl per lane.

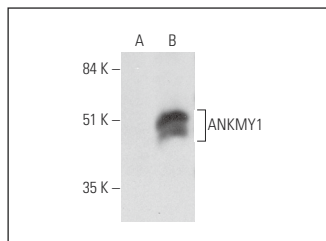
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

ANKMY1 (H-10): sc-514974 is recommended as a positive control antibody for Western Blot analysis of enhanced human ANKMY1 expression in ANKMY1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



ANKMY1 (H-10): sc-514974. Western blot analysis of ANKMY1 expression in non-transfected: sc-117752 (A) and human ANKMY1 transfected: sc-114400 (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 for detailed protocols and support products.