

ANKMY1 (Y-15): sc-107404

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 7 ANK repeats, 3 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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CHROMOSOMAL LOCATION

Genetic locus: ANKMY1 (human) mapping to 2q37.3; Ankmy1 (mouse) mapping to 1 D.

SOURCE

ANKMY1 (Y-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of ANKMY1 of mouse origin.

STORAGE

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

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-107404 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ANKMY1 (Y-15) is recommended for detection of ANKMY1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with family member ANKMY2.

ANKMY1 (Y-15) is also recommended for detection of ANKMY1 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for ANKMY1 siRNA (h): sc-95015, ANKMY1 siRNA (m): sc-141071, ANKMY1 shRNA Plasmid (h): sc-95015-SH, ANKMY1 shRNA Plasmid (m): sc-141071-SH, ANKMY1 shRNA (h) Lentiviral Particles: sc-95015-V and ANKMY1 shRNA (m) Lentiviral Particles: sc-141071-V.

Molecular Weight of ANKMY1: 106 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.