

ANKS4B (S-15): sc-241821

BACKGROUND

ANKS4B (ankyrin repeat and sterile alpha motif domain containing 4B), also known as Harp (harmonin-interacting ankyrin repeat-containing protein), is a 460 amino acid coiled-coil protein that interacts with the Harmonin PDZ1 domain in epithelial tissues by way of its C-terminus. Encoded by a gene that maps to human chromosome 16p12.2, ANKS4B contains two exons, three ANK repeats and one SAM (sterile α motif) domain. ANKS4B is expressed in kidney, liver, small intestine, colon, pancreas and purified pancreatic cells, as well as developing lung, kidney, salivary glands and cochlea. Conserved in chimpanzee, canine, bovine, mouse, chicken and zebrafish, ANKS4B shares significant homology with USH1G, which plays a major role in Usher syndrome. ANKS4B may also play a role in Usher syndrome and may facilitate signal transduction in epithelia.

REFERENCES

- Weil, D., et al. 2003. Usher syndrome type I G (USH1G) is caused by mutations in the gene encoding SANS, a protein that associates with the USH1C protein, harmonin. *Hum. Mol. Genet.* 12: 463-471.
- Johnston, A.M., et al. 2004. Harp (harmonin-interacting, ankyrin repeat-containing protein), a novel protein that interacts with harmonin in epithelial tissues. *Genes Cells* 9: 967-982.
- Reiners, J. and Wolfrum, U. 2006. Molecular analysis of the supramolecular usher protein complex in the retina. Harmonin as the key protein of the Usher syndrome. *Adv. Exp. Med. Biol.* 572: 349-353.
- Yokota, T., et al. 2006. Brain site-specific gene expression analysis in Alzheimer's disease patients. *Eur. J. Clin. Invest.* 36: 820-830.

CHROMOSOMAL LOCATION

Genetic locus: ANKS4B (human) mapping to 16p12.2; Anks4b (mouse) mapping to 7 F2.

SOURCE

ANKS4B (S-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ANKS4B of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-241821 P, (100 μ g 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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

APPLICATIONS

ANKS4B (S-15) is recommended for detection of ANKS4B of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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 ANKS3 or ANKS6.

ANKS4B (S-15) is also recommended for detection of ANKS4B in additional species, including equine, canine and porcine.

Suitable for use as control antibody for ANKS4B siRNA (h): sc-93389, ANKS4B siRNA (m): sc-141120, ANKS4B shRNA Plasmid (h): sc-93389-SH, ANKS4B shRNA Plasmid (m): sc-141120-SH, ANKS4B shRNA (h) Lentiviral Particles: sc-93389-V and ANKS4B shRNA (m) Lentiviral Particles: sc-141120-V.

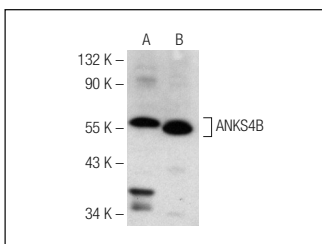
Molecular Weight of ANKS4B: 48 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, RT-4 whole cell lysate: sc-364257 or MDCK cell lysate: sc-2252.

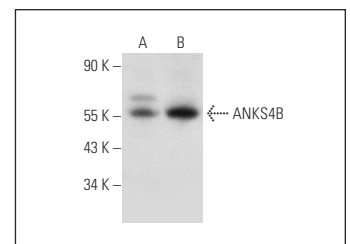
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



ANKS4B (S-15): sc-241821. Western blot analysis of ANKS4B expression in MDCK (A) and Hep G2 (B) whole cell lysates.



ANKS4B (S-15): sc-241821. Western blot analysis of ANKS4B expression in RT-4 (A) and NK-92 (B) whole cell lysates.

RESEARCH USE

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