

Ankyrin B (H-300): sc-28560

BACKGROUND

Members of the ankyrin family of proteins mediate the attachment of integral membrane proteins to the cytoskeleton. ANK1, ANK2 and ANK3 genes encode for the proteins in this family: Ankyrin-1 (also designated Ankyrin R), Ankyrin B and Ankyrin G, respectively. The proteins are structured similarly, each composed of an N-terminal domain with multiple ankyrin repeats, a highly conserved central spectrin binding domain and C-terminal regulatory domains which are susceptible to the most variance. Both Ankyrin B and Ankyrin G are essential for normal neuronal functions. Ankyrin B, or brain ankyrin, is predominantly expressed in the plasma membrane of neurons as well as glial cells throughout the brain. Two transcripts have been described, with alternative splicing resulting in additional isoforms. The Ankyrin B protein associates with the spectrin-Actin network, mediates axon fasciculation and stabilizes axon bundles. Ankyrin B is required for coordinated assembly of Na/Ca exchanger, Na/K ATPase and inositol trisphosphate (InsP(3)) receptor at transverse-tubule/sarcoplasmic reticulum sites in cardiomyocytes.

CHROMOSOMAL LOCATION

Genetic locus: ANK2 (human) mapping to 4q25; Ank2 (mouse) mapping to 3 G2.

SOURCE

Ankyrin B (H-300) is a rabbit polyclonal antibody raised against amino acids 3625-3924 mapping at the C-terminus of Ankyrin B of human origin.

PRODUCT

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

STORAGE

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

APPLICATIONS

Ankyrin B (H-300) is recommended for detection of Ankyrin B of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

Suitable for use as control antibody for Ankyrin B siRNA (h): sc-29680, Ankyrin B siRNA (m): sc-29681, Ankyrin B shRNA Plasmid (h): sc-29680-SH, Ankyrin B shRNA Plasmid (m): sc-29681-SH, Ankyrin B shRNA (h) Lentiviral Particles: sc-29680-V and Ankyrin B shRNA (m) Lentiviral Particles: sc-29681-V.

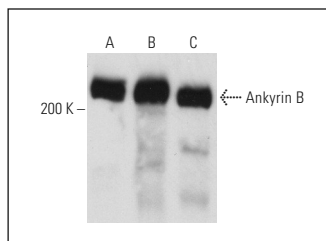
Molecular Weight of Ankyrin B isoforms: 220 kDa.

Positive Controls: Y79 cell lysate: sc-2240, SK-N-SH cell lysate: sc-2410 or BC₃H1 cell lysate: sc-2299.

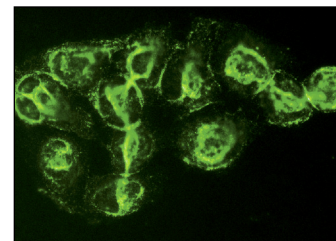
RECOMMENDED SECONDARY REAGENTS

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



Ankyrin B (H-300): sc-28560. Western blot analysis of Ankyrin B expression in Y79 (A), SK-N-SH (B) and BC₃H1 (C) whole cell lysates.



Ankyrin B (H-300): sc-28560. Immunofluorescence staining of methanol-fixed HeLa cells showing membrane localization.

SELECT PRODUCT CITATIONS

1. Laird, J.G., et al. 2015. Identification of a VxP targeting signal in the flagellar Na⁺/K⁺-ATPase. Traffic. E-published.

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.

MONOS
Satisfaction
Guaranteed

Try **Ankyrin B (2.20): sc-12718** or **Ankyrin B (G-11): sc-365757**, our highly recommended monoclonal alternatives to Ankyrin B (H-300).