

Ankyrin-1 (H-125): sc-135329

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. Ankyrin-1 is a membrane protein that links the cytoskeleton to the plasma membrane in erythrocytes, cardiac and skeletal muscle, and brain. It is expressed as many isoforms, including a full length protein and several shorter isoforms. Ankyrin-1 has also been found to be defective in patients with hereditary spherocytosis (HS), a common hemolytic anemia.

CHROMOSOMAL LOCATION

Genetic locus: ANK1 (human) mapping to 8p11.21; Ank1 (mouse) mapping to 8 A2.

SOURCE

Ankyrin-1 (H-125) is a rabbit polyclonal antibody raised against amino acids 820-952 mapping within an internal region of Ankyrin-1 isoform 9 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-1 (H-125) is recommended for detection of Ankyrin-1 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); non cross-reactive with Ankyrin-1-2, Ankyrin-1-3, Ankyrin-1-4, Ankyrin-1-5, Ankyrin-1-7, Ankyrin-1-8, Ankyrin-1-9, Ankyrin-1-10, Ankyrin-1-11 Ankyrin-1-12, Ankyrin-1-13, Ankyrin-1-Er16, Ankyrin-Mu18, Ankyrin-1-Mu19, Ankyrin-1-Mu20 or Ankyrin-1-Br21.

Ankyrin-1 (H-125) is also recommended for detection of Ankyrin-1 in additional species, including equine.

Suitable for use as control antibody for Ankyrin-1 siRNA (h): sc-43615, Ankyrin-1 siRNA (m): sc-43262, Ankyrin-1 shRNA Plasmid (h): sc-43615-SH, Ankyrin-1 shRNA Plasmid (m): sc-43262-SH, Ankyrin-1 shRNA (h) Lentiviral Particles: sc-43615-V and Ankyrin-1 shRNA (m) Lentiviral Particles: sc-43262-V.

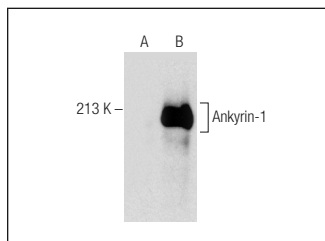
Molecular Weight of Ankyrin-1: 171-206 kDa.

Positive Controls: Ankyrin-1 (h2): 293T Lysate: sc-371924.

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-1 (H-125): sc-135329. Western blot analysis of Ankyrin-1 expression in non-transfected: sc-117752 (A) and human Ankyrin-1 transfected: sc-371924 (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 or our catalog for detailed protocols and support products.



Try **Ankyrin-1 (8C3): sc-12733** or **Ankyrin-1 (H-4): sc-374240**, our highly recommended monoclonal alternatives to Ankyrin-1 (H-125).