

Ankyrin-1 (K-20): sc-87551

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 (K-20) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of Ankyrin-1 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-87551 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

Ankyrin-1 (K-20) 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-Mu17, Ankyrin-1-Mu18, Ankyrin-1-Mu19, and Ankyrin-Mu20.

Ankyrin-1 (K-20) is also recommended for detection of Ankyrin-1 in additional species, including equine, canine, bovine and porcine.

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.

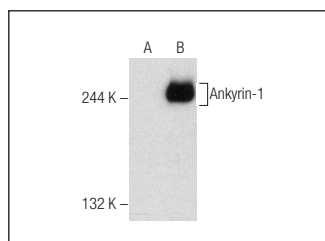
Molecular Weight of Ankyrin-1: 171-206 kDa.

Positive Controls: Ankyrin-1 (h): 293T Lysate: sc-371924, HEL 92.1.7 cell lysate: sc-2270 or TF-1 cell lysate: sc-2412.

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 (K-20): sc-87551. 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.

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.

MONOS
Satisfaction
Guaranteed

Try **Ankyrin-1 (8C3): sc-12733** or **Ankyrin-1 (H-4): sc-374240**, our highly recommended monoclonal alternatives to Ankyrin-1 (K-20).