

ANKRD22 (E-16): sc-241809

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. ANKRD22 (ankyrin repeat domain 22) is a 191 amino acid protein that contains four ANK repeats. Conserved in chimpanzee, dog, cow, mouse, rat, chicken and zebrafish, ANKRD22 is encoded by a gene that maps to human chromosome 10. Chromosome 10 encodes nearly 1,200 genes within 135 million bases, making up approximately 4.5% of the human genome. Several protein-coding genes, including those that encode for chemokines, cadherins, excision repair proteins, early growth response factors (Egrs) and fibroblast growth receptors (FGFRs), are located on chromosome 10. Defects in genes that map to chromosome 10 are associated with Charcot-Marie Tooth disease, Jackson-Weiss syndrome, Usher syndrome, nonsyndromic deafness, Wolman's syndrome, Cowden syndrome, multiple endocrine neoplasia type 2 and porphyria.

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CHROMOSOMAL LOCATION

Genetic locus: ANKRD22 (human) mapping to 10q23.31; Ankrd22 (mouse) mapping to 19 C1.

SOURCE

ANKRD22 (E-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ANKRD22 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.

Blocking peptide available for competition studies, sc-241809 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ANKRD22 (E-16) is recommended for detection of ANKRD22 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 other ANKRD family members.

ANKRD22 (E-16) is also recommended for detection of ANKRD22 in additional species, including equine and canine.

Suitable for use as control antibody for ANKRD22 siRNA (h): sc-90443, ANKRD22 siRNA (m): sc-141083, ANKRD22 shRNA Plasmid (h): sc-90443-SH, ANKRD22 shRNA Plasmid (m): sc-141083-SH, ANKRD22 shRNA (h) Lentiviral Particles: sc-90443-V and ANKRD22 shRNA (m) Lentiviral Particles: sc-141083-V.

Molecular Weight of ANKRD22: 22 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.

STORAGE

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

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.