

ANKRD35 (Q-16): sc-163691

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. ANKRD35 (ankyrin repeat domain 35) is a 1,001 amino acid protein containing 6 ANK repeats. ANKRD35 is encoded by a gene located on human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome. Chromosome 1 houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome. Aberrations in chromosome 1 are found in a variety of cancers, including head and neck cancer, malignant melanoma and multiple myeloma.

REFERENCES

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2. Bennett, V., et al. 1985. Ankyrin and synapsin: spectrin-binding proteins associated with brain membranes. *J. Cell. Biochem.* 29: 157-169.
3. Davis, J., et al. 1989. Diversity in membrane binding sites of ankyrins. Brain ankyrin, erythrocyte ankyrin, and processed erythrocyte ankyrin associate with distinct sites in kidney microsomes. *J. Biol. Chem.* 264: 6417-6426.
4. Hryniewicz-Jankowska, A., et al. 2002. Ankyrins, multifunctional proteins involved in many cellular pathways. *Folia Histochem. Cytobiol.* 40: 239-249.
5. Cai, X., et al. 2006. Molecular evolution of the ankyrin gene family. *Mol. Biol. Evol.* 23: 550-558.
6. Hennah, W., et al. 2006. Genes and schizophrenia: beyond schizophrenia: the role of DISC1 in major mental illness. *Schizophr. Bull.* 32: 409-416.
7. Stacey, S.N., et al. 2008. Common variants on 1p36 and 1q42 are associated with cutaneous basal cell carcinoma but not with melanoma or pigmentation traits. *Nat. Genet.* 40: 1313-1318.

CHROMOSOMAL LOCATION

Genetic locus: ANKRD35 (human) mapping to 1q21.1; Ankrd35 (mouse) mapping to 3 F2.1.

SOURCE

ANKRD35 (Q-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ANKRD35 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-163691 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ANKRD35 (Q-16) is recommended for detection of ANKRD35 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.

ANKRD35 (Q-16) is also recommended for detection of ANKRD35 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ANKRD35 siRNA (h): sc-88418, ANKRD35 siRNA (m): sc-141094, ANKRD35 shRNA Plasmid (h): sc-88418-SH, ANKRD35 shRNA Plasmid (m): sc-141094-SH, ANKRD35 shRNA (h) Lentiviral Particles: sc-88418-V and ANKRD35 shRNA (m) Lentiviral Particles: sc-141094-V.

Molecular Weight of ANKRD35: 110 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.