

ANKRD16 (Q-17): sc-244919

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. ANKRD16 (ankyrin repeat domain 16) is a 361 amino acid protein that contains nine ANK repeats. Encoded by a gene that maps to human chromosome 10p15.1, ANKRD16 is conserved in chimpanzee, bovine, mouse, rat, chicken and zebrafish. Down-regulation of ANKRD16, an HRT1 and HES target gene, in hutchinson-gilford progeria syndrome (HGPS) cells confirms activation of the Notch signaling pathway, thereby playing a vital role in the premature-aging disease, physiological aging, adult stem cell dysfunction and progressive deterioration of tissue functions. The ANK repeats of ANKRD16 are also directly affected by alternative splicing in breast and ovarian cancer, supporting the theory that splicing likely aids malignant growth.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ANKRD16 (human) mapping to 10p15.1.

SOURCE

ANKRD16 (Q-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ANKRD16 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-244919 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ANKRD16 (Q-17) is recommended for detection of ANKRD16 of 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.

Suitable for use as control antibody for ANKRD16 siRNA (h): sc-90379, ANKRD16 shRNA Plasmid (h): sc-90379-SH and ANKRD16 shRNA (h) Lentiviral Particles: sc-90379-V.

Molecular Weight of ANKRD16: 39 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.