

ANKRD32 (G-1): sc-514264

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. ANKRD32 (ankyrin repeat domain 32), also known as BRCTD1 (BRCT domain containing 1), is a 1,058 amino acid protein that contains three ANK repeats and two BRCT domains. Conserved in chimpanzee, canine, bovine, mouse, rat and chicken, ANKRD32 is encoded by a gene that maps to human chromosome 5q15. Deletion of human chromosome 5q14.3-q15, which includes ANKRD32, is linked to periventricular heterotopia, mental retardation, and epilepsy. Chromosome 5 makes up approximately 6% of the human genome and contains 181 million base pairs, which encode 1,000 genes.

REFERENCES

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2. L'Espérance, S., et al. 2008. Global gene expression analysis of early response to chemotherapy treatment in ovarian cancer spheroids. *BMC Genomics* 9: 99.
3. Bertucci, F., et al. 2008. Lobular and ductal carcinomas of the breast have distinct genomic and expression profiles. *Oncogene* 27: 5359-5372.
4. Chapman, E.J., et al. 2009. Integrated genomic and transcriptional analysis of the *in vitro* evolution of telomerase-immortalized urothelial cells (TERT-NHUC). *Genes Chromosomes Cancer* 48: 694-710.
5. Cardoso, C., et al. 2009. Periventricular heterotopia, mental retardation, and epilepsy associated with 5q14.3-q15 deletion. *Neurology* 72: 784-792.
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7. Scott, L.J., et al. 2009. Genome-wide association and meta-analysis of bipolar disorder in individuals of European ancestry. *Proc. Natl. Acad. Sci. USA* 106: 7501-7506.

CHROMOSOMAL LOCATION

Genetic locus: ANKRD32 (human) mapping to 5q15; Ankrd32 (mouse) mapping to 13 C1.

SOURCE

ANKRD32 (G-1) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 95-118 near the N-terminus of ANKRD32 of human origin.

PRODUCT

Each vial contains 200 µg IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-514264 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

ANKRD32 (G-1) is recommended for detection of ANKRD32 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for ANKRD32 siRNA (h): sc-91665, ANKRD32 siRNA (m): sc-141090, ANKRD32 shRNA Plasmid (h): sc-91665-SH, ANKRD32 shRNA Plasmid (m): sc-141090-SH, ANKRD32 shRNA (h) Lentiviral Particles: sc-91665-V and ANKRD32 shRNA (m) Lentiviral Particles: sc-141090-V.

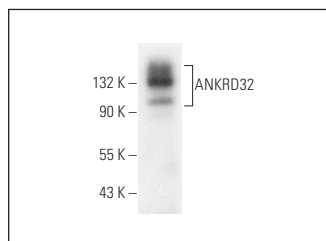
Molecular Weight of ANKRD32: 121 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BPHRP: sc-516102 or m-IgGκ BPHRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BPFITC: sc-516140 or m-IgGκ BPE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



ANKRD32 (G-1): sc-514264. Western blot analysis of ANKRD32 expression in Hep G2 whole cell lysate.

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 for detailed protocols and support products.