

ANKRD36 (h): 293T Lysate: sc-116243

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. ANKRD36 (ankyrin repeat domain 36), also known as ANKRD36A, is a 1,941 amino acid protein that contains 6 ANK repeats and belongs to the ANKRD36 family. Existing as four alternatively spliced isoforms, ANKRD36 is encoded by a gene that maps to human chromosome 2q11.2. Translocation of exon 2 at chromosome 2q11.2, which includes ANKRD36, and intron 1 at chromosome 11p15.1 may be associated with T-cell acute lymphoblastic leukemia. As the second largest human chromosome, chromosome 2 makes up approximately 8% of the human genome and contains 237 million bases encoding over 1,400 genes. Chromosome 2 contains a probable vestigial second centromere, as well as vestigial telomeres, which gives credence to the hypothesis that human chromosome 2 formed as a result of an ancient fusion of two ancestral chromosomes, which are still present in modern day apes.

REFERENCES

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2. Avarello, R., et al. 1992. Evidence for an ancestral alphoid domain on the long arm of human chromosome 2. *Hum. Genet.* 89: 247-249.
3. Hillier, L.W., et al. 2005. Generation and annotation of the DNA sequences of human chromosomes 2 and 4. *Nature* 434: 724-731.
4. Akiyama, M., et al. 2007. Compound heterozygous ABCA12 mutations including a novel nonsense mutation underlie harlequin ichthyosis. *Dermatology* 215: 155-159.
5. Marshall, J.D., et al. 2007. Spectrum of ALMS1 variants and evaluation of genotype-phenotype correlations in Alström syndrome. *Hum. Mutat.* 28: 1114-1123.
6. Guastadisegni, M.C., et al. 2008. Bone marrow ectopic expression of a non-coding RNA in childhood T-cell acute lymphoblastic leukemia with a novel t(2;11)(q11.2;p15.1) translocation. *Mol. Cancer* 7: 80.

CHROMOSOMAL LOCATION

Genetic locus: ANKRD36 (human) mapping to 2q11.2.

PRODUCT

ANKRD36 (h): 293T Lysate represents a lysate of human ANKRD36 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

APPLICATIONS

ANKRD36 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive ANKRD36 antibodies. Recommended use: 10-20 µl per lane.

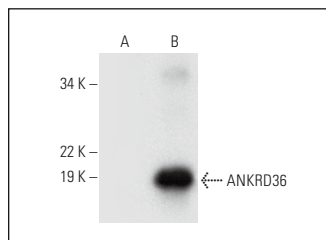
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

ANKRD36 (E-4): sc-393764 is recommended as a positive control antibody for Western Blot analysis of enhanced human ANKRD36 expression in ANKRD36 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (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.

DATA



ANKRD36 (E-4): sc-393764. Western blot analysis of ANKRD36 expression in non-transfected: sc-117752 (A) and human ANKRD36 transfected: sc-116243 (B) 293T whole cell lysates.

RESEARCH USE

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