

ANKRD24 (E-17): sc-241811

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. ANKRD24 (ankyrin repeat domain 24) is a 1,146 amino acid coiled-coil protein that contains five ANK repeats. Conserved in dog, cow, mouse, rat, chicken and zebrafish, ANKRD24 exists as two alternatively spliced isoforms and is encoded by a gene that maps to human chromosome 19. Consisting of approximately 63 million bases encoding over 1,400 genes, chromosome 19 makes up over 2% of human genomic DNA. Chromosome 19 has the greatest gene density of the human chromosomes and is home to numerous immunoglobulin superfamily members, ICAMs, the CEACAM family, the PSG family and Fc α receptors. Key genes for eye color and hair color also map to chromosome 19. Peutz-Jeghers syndrome, spinocerebellar ataxia type 6, the stroke disorder CADASIL, hypercholesterolemia and Insulin-dependent diabetes are also linked to chromosome 19.

REFERENCES

- Zimmermann, W., et al. 1988. Chromosomal localization of the carcinoembryonic antigen gene family and differential expression in various tumors. *Cancer Res.* 48: 2550-2554.
- LaPoint, S.F., et al. 2000. Cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy (CADASIL). *Adv. Anat. Pathol.* 7: 307-321.
- Trettel, F., et al. 2000. A fine physical map of the CACNA1A gene region on 19p13.1-p13.2 chromosome. *Gene* 241: 45-50.
- Buchet-Poyau, K., et al. 2002. Search for the second Peutz-Jeghers syndrome locus: exclusion of the STK13, PRKCG, KLK10, and PSCD2 genes on chromosome 19 and the STK11IP gene on chromosome 2. *Cytogenet. Genome Res.* 97: 171-178.
- Moodie, S.J., et al. 2002. Analysis of candidate genes on chromosome 19 in coeliac disease: an association study of the KIR and LILR gene clusters. *Eur. J. Immunogenet.* 29: 287-291.
- Grimwood, J., et al. 2004. The DNA sequence and biology of human chromosome 19. *Nature* 428: 529-535.
- Parham, P. 2005. Immunogenetics of killer cell immunoglobulin-like receptors. *Mol. Immunol.* 42: 459-462.
- Vikelis, M., et al. 2007. A novel CADASIL-causing mutation in a stroke patient. *Swiss Med. Wkly.* 137: 323-325.

CHROMOSOMAL LOCATION

Genetic locus: ANKRD24 (human) mapping to 19p13.3; Ankrd24 (mouse) mapping to 10 C1.

SOURCE

ANKRD24 (E-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ANKRD24 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-241811 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ANKRD24 (E-17) is recommended for detection of ANKRD24 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

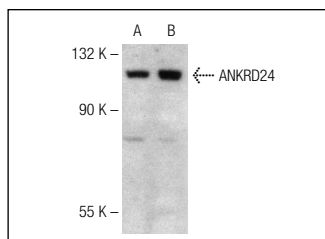
ANKRD24 (E-17) is also recommended for detection of ANKRD24 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for ANKRD24 siRNA (m): sc-141085, ANKRD24 shRNA Plasmid (m): sc-141085-SH and ANKRD24 shRNA (m) Lentiviral Particles: sc-141085-V.

Molecular Weight of ANKRD24: 124 kDa.

Positive Controls: Y79 cell lysate: sc-2240 or TE671 cell lysate: sc-2416.

DATA



ANKRD24 (E-17): sc-241811. Western blot analysis of ANKRD24 expression in TE671 (A) and Y79 (B) whole cell lysates.

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.