

# ANKAR (L-14): sc-167083

## BACKGROUND

ANKAR (ankyrin and armadillo repeat containing) is a 1,434 amino acid single-pass membrane protein that contains five ANK repeats, 6 ARM repeats, a eukaryotic RNA recognition motif and a cell surface-to-Golgi transport motif. Conserved in chimpanzee, canine, mouse, rat and zebrafish, ANKAR is ubiquitously expressed, with highest levels in pancreas and lowest in skeletal muscle. ANKAR contains a minimum of thirty-one exons, exists as four alternatively spliced isoforms and is encoded by a gene that maps to human chromosome 2q32.2. 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 aliphoid 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. Thomas, A.C., et al. 2006. ABCA12 is the major harlequin ichthyosis gene. *J. Invest. Dermatol.* 126: 2408-2413.
5. Akiyama, M., et al. 2007. Compound heterozygous ABCA12 mutations including a novel nonsense mutation underlie harlequin ichthyosis. *Dermatology* 215: 155-159.
6. Marshall, J.D., et al. 2007. Alström syndrome. *Eur. J. Hum. Genet.* 15: 1193-1202.
7. Marshall, J.D., et al. 2007. Spectrum of ALMS1 variants and evaluation of genotype-phenotype correlations in Alström syndrome. *Hum. Mutat.* 28: 1114-1123.

## CHROMOSOMAL LOCATION

Genetic locus: ANKAR (human) mapping to 2q32.2; Ankar (mouse) mapping to 1 C3.

## SOURCE

ANKAR (L-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ANKAR 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-167083 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

ANKAR (L-14) is recommended for detection of ANKAR of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

ANKAR (L-14) is also recommended for detection of ANKAR in additional species, including equine, canine and porcine.

Suitable for use as control antibody for ANKAR siRNA (h): sc-94582, ANKAR siRNA (m): sc-141064, ANKAR shRNA Plasmid (h): sc-94582-SH, ANKAR shRNA Plasmid (m): sc-141064-SH, ANKAR shRNA (h) Lentiviral Particles: sc-94582-V and ANKAR shRNA (m) Lentiviral Particles: sc-141064-V.

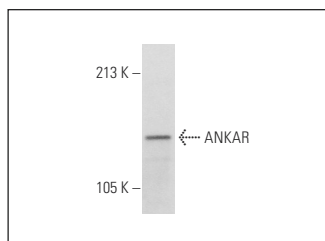
Molecular Weight of ANKAR: 162 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

## 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

## DATA



ANKAR (L-14): sc-167083. Western blot analysis of ANKAR expression in HeLa 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](http://www.scbt.com) or our catalog for detailed protocols and support products.