

# ANKRD43 (N-15): sc-244951

## 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. ANKRD43 (ankyrin repeat domain 43) is a 549 amino acid protein that contains 2 ANK repeats and participates in DNA binding and transcription regulation. Encoded by a gene that maps to human chromosome 5q31.1, ANKRD43 is conserved in bovine, mouse, rat and chicken. ANKRD43 exhibits nuclear localization and is largely expressed in lateral ganglionic eminences (LGE) mantle, where differentiating neurons are located. ANKRD43 is also expressed in the dorsal aspect of the LGE ventricular zone/subventricular zone (SVZ) and in adult striatal projection neurons. ANKRD43 is up-regulated by microRNA-200c, thereby playing a role in the development of mesodermal and neural tissues and tumor progression.

## REFERENCES

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- Tucker, E.S., Segall, S., Gopalakrishna, D., Wu, Y., Vernon, M., Polleux, F. and Lamantia, A.S. 2008. Molecular specification and patterning of progenitor cells in the lateral and medial ganglionic eminences. *J. Neurosci.* 28: 9504-9518.

## CHROMOSOMAL LOCATION

Genetic locus: SOWAHA (human) mapping to 5q31.1; Sowaha (mouse) mapping to 11 B1.3.

## SOURCE

ANKRD43 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ANKRD43 of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-244951 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

ANKRD43 (N-15) is recommended for detection of ANKRD43 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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); non cross-reactive with other ANKRD family members.

ANKRD43 (N-15) is also recommended for detection of ANKRD43 in additional species, including bovine and porcine.

Suitable for use as control antibody for ANKRD43 siRNA (h): sc-91782, ANKRD43 siRNA (m): sc-141102, ANKRD43 shRNA Plasmid (h): sc-91782-SH, ANKRD43 shRNA Plasmid (m): sc-141102-SH, ANKRD43 shRNA (h) Lentiviral Particles: sc-91782-V and ANKRD43 shRNA (m) Lentiviral Particles: sc-141102-V.

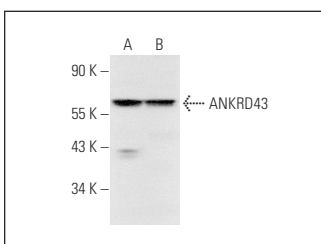
Molecular Weight of ANKRD43: 57 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or Hep G2 cell lysate: sc-2227.

## 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



ANKRD43 (N-15): sc-244951. Western blot analysis of ANKRD43 expression in Jurkat (A) and Hep G2 (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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.