

ANKRD11 (N-16): sc-107406

BACKGROUND

ANKRD11 (Ankyrin repeat domain-containing protein 11, Ankyrin repeat-containing cofactor 1) is a 2,664 amino acid protein encoded by the human gene ANKRD11. This nuclear protein belongs to a novel family of ankyrin repeat-containing cofactors for p160 nuclear receptor coactivators and contains four Ankyrin repeats. Members of the p160 nuclear receptor coactivators interact with liganded nuclear receptors to enhance transcription of target genes. ANKRD11 has two intrinsic repression domains (RD): an N-terminal RD1 at residues 318-611 and a C-terminal RD2 at 2369-2663. ANKRD11 also contains an activation domain (AD) capable of stimulating transcription *in vitro*. The minimal AD is delimited to a 70 amino acid region at residues 2076-2145. Overall, ANKRD11 acts as a transcriptional repressor, suggesting that RD domains may suppress the AD activity. ANKRD11 shows the potential of modulating a combination of repression and activation signals.

REFERENCES

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- Linke, S., et al. 2007. Characterization of ankyrin repeat-containing proteins as substrates of the asparaginyl hydroxylase factor inhibiting hypoxia-inducible transcription factor. *Methods Enzymol.* 435: 61-85.
- Zhang, A., et al. 2007. Characterization of transcriptional regulatory domains of ankyrin repeat cofactor-1. *Biochem. Biophys. Res. Commun.* 358: 1034-1040.
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- Barbaric, I., et al. 2007. An ENU-induced mutation in the Ankrd11 gene results in an osteopenia-like phenotype in the mouse mutant yoda. *Physiol. Genomics* 32: 311-321.

CHROMOSOMAL LOCATION

Genetic locus: ANKRD11 (human) mapping to 16q24.3; Ankrd11 (mouse) mapping to 8 E1.

SOURCE

ANKRD11 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of ANKRD11 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-107406 P, (100 µg 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

ANKRD11 (N-16) is recommended for detection of ANKRD11 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

ANKRD11 (N-16) is also recommended for detection of ANKRD11 in additional species, including equine, canine and avian.

Suitable for use as control antibody for ANKRD11 siRNA (h): sc-93530, ANKRD11 siRNA (m): sc-77402, ANKRD11 shRNA Plasmid (h): sc-93530-SH, ANKRD11 shRNA Plasmid (m): sc-77402-SH, ANKRD11 shRNA (h) Lentiviral Particles: sc-93530-V and ANKRD11 shRNA (m) Lentiviral Particles: sc-77402-V.

Molecular Weight of ANKRD11: 298 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) 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.

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 or our catalog for detailed protocols and support products.