

# ANKRD28/44/52 (H-135): sc-99114

## BACKGROUND

ANKRD28 (ankyrin repeat domain-containing protein 28), also known as PITK, is a 1,086 amino acid protein that localizes to the nucleus and contains 27 ankyrin repeats. Expressed in a variety of tissues, ANKRD28 functions to selectively inhibit the activity of the PP1 holoenzyme (a trimeric complex that exhibits phosphatase activity and regulates a broad range of cellular functions). Specifically, ANKRD28 targets the catalytic subunit of the PP1 complex to the nucleus and promotes the PP1-dependent dephosphorylation of hnRNP K, a transcriptional regulator. ANKRD28 may also function as a fusion partner for Nup98, an event that may lead to hematologic malignancies, suggesting a role for ANKRD28 in tumorigenesis. ANKRD44 (ankyrin repeat domain-containing protein 44) and ANKRD52 (ankyrin repeat domain-containing protein 52) contain ankyrin repeats but, unlike ANKRD28, both ANKRD44 and ANKRD52 function as regulatory subunits of the protein phosphatase 6 (PP6) holoenzyme and are thought to be involved in phosphoprotein substrate recognition.

## REFERENCES

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## RESEARCH USE

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

## SOURCE

ANKRD28/44/52 (H-135) is a rabbit polyclonal antibody raised against amino acids 262-394 mapping within an internal region of ANKRD44 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.

## APPLICATIONS

ANKRD28/44/52 (H-135) is recommended for detection of ANKRD28 of mouse, rat and human origin, ANKRD52 of human origin and ANKRD44 of mouse 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); non cross-reactive with other ANKRD family members .

ANKRD28/44/52 (H-135) is also recommended for detection of ANKRD28 of m, r and h origin, ANKRD52 of human origin and ANKRD44 in additional species, including equine, canine, porcine and avian.

Molecular Weight of ANKRD28/ANKRD44/ANKRD52: 114/108/115 kDa.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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](http://www.scbt.com) or our catalog for detailed protocols and support products.