

RNF166 (P-15): sc-248463

BACKGROUND

The RING-type zinc finger motif is present in a number of viral and eukaryotic proteins and is made of a conserved cysteine-rich domain that is able to bind two zinc atoms. Proteins that contain this conserved domain are generally involved in the ubiquitination pathway of protein degradation. RNF166 (RING finger protein 166) is a 237 amino acid protein that contains one RING-type zinc finger and a UIM (ubiquitin-interacting motif) repeat. Existing as two alternatively spliced isoforms, RNF166 is encoded by a gene that maps to human chromosome 16q24.3. Chromosome 16 encodes over 900 genes and comprises nearly 3% of the human genome. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is also associated with chromosome 16, as is Crohn's disease, which is a gastrointestinal inflammatory condition.

REFERENCES

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- Breuning, M.H., et al. 1993. Rubinstein-Taybi syndrome caused by sub-microscopic deletions within 16p13.3. *Am. J. Hum. Genet.* 52: 249-254.
- Freemont, P.S. 1993. The RING finger. A novel protein sequence motif related to the zinc finger. *Ann. N.Y. Acad. Sci.* 684: 174-192.
- Borden, K.L. and Freemont, P.S. 1996. The RING finger domain: a recent example of a sequence-structure family. *Curr. Opin. Struct. Biol.* 6: 395-401.
- Lorick, K.L., et al. 1999. RING fingers mediate ubiquitin-conjugating enzyme (E2)-dependent ubiquitination. *Proc. Natl. Acad. Sci. USA* 96: 11364-11369.
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CHROMOSOMAL LOCATION

Genetic locus: RNF166 (human) mapping to 16q24.3; Rnf166 (mouse) mapping to 8 E1.

SOURCE

RNF166 (P-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of RNF166 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-248463 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

RNF166 (P-15) is recommended for detection of RNF166 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); non cross-reactive with other RNF family members.

RNF166 (P-15) is also recommended for detection of RNF166 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for RNF166 siRNA (h): sc-93548, RNF166 siRNA (m): sc-153022, RNF166 shRNA Plasmid (h): sc-93548-SH, RNF166 shRNA Plasmid (m): sc-153022-SH, RNF166 shRNA (h) Lentiviral Particles: sc-93548-V and RNF166 shRNA (m) Lentiviral Particles: sc-153022-V.

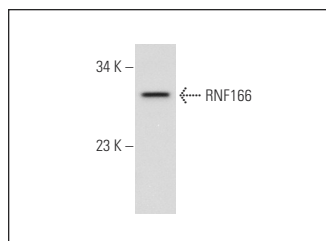
Molecular Weight of RNF166 isoforms: 26/14 kDa.

Positive Controls: THP-1 cell lysate: sc-2238.

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



RNF166 (P-15): sc-248463. Western blot analysis of RNF166 expression in THP-1 whole cell lysate.

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.