

RNF167 (N-14): sc-244028

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 protein-protein interactions and protein-DNA interactions. RNF167 (RING finger protein 167), also known as RING105, contains one RING-type zinc finger domain and one protease associated (PA) domain. RNF167 is a single-pass membrane protein localized to the endomembrane system of cytoplasmic membranes. Strongly expressed in kidney and liver, RNF167 may act as an E3 ubiquitin-protein ligase or as part of the E3 complex, which accepts ubiquitin from specific E2 enzymes and transfers it to substrates, such as ORCTL2. RNF167 may also be involved in growth regulation during G₁/S transition.

REFERENCES

1. Wan, D., et al. 2004. Large-scale cDNA transfection screening for genes related to cancer development and progression. *Proc. Natl. Acad. Sci. USA* 101: 15724-15729.
2. Kotoshiba, S., et al. 2005. Molecular dissection of the interaction between p27 and Kip1 ubiquitylation-promoting complex, the ubiquitin ligase that regulates proteolysis of p27 in G₁ phase. *J. Biol. Chem.* 280: 17694-17700.
3. Yamada, H.Y. and Gorbsky, G.J. 2006. Tumor suppressor candidate TSSC5 is regulated by Ubch6 and a novel ubiquitin ligase RING105. *Oncogene* 25: 1330-1339.
4. Online Mendelian Inheritance in Man, OMIM™. 2006. Johns Hopkins University, Baltimore, MD. MIM Number: 610431. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Nakakuki, M., et al. 2007. A transcription factor of lipid synthesis, sterol regulatory element-binding protein (SREBP)-1a causes G₁ cell-cycle arrest after accumulation of cyclin-dependent kinase (cdk) inhibitors. *FEBS J.* 274: 4440-4452.
6. Lee, J.G. and Kay, E.P. 2008. Involvement of two distinct ubiquitin E3 ligase systems for p27 degradation in corneal endothelial cells. *Invest. Ophthalmol. Vis. Sci.* 49: 189-196.

CHROMOSOMAL LOCATION

Genetic locus: RNF167 (human) mapping to 17p13.2; Rnf167 (mouse) mapping to 11 B3.

SOURCE

RNF167 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of RNF167 of human origin.

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.

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-244028 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

RNF167 (N-14) is recommended for detection of RNF167 of mouse, rat 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); non cross-reactive with other RNF family members.

RNF167 (N-14) is also recommended for detection of RNF167 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for RNF167 siRNA (h): sc-93642, RNF167 siRNA (m): sc-153023, RNF167 shRNA Plasmid (h): sc-93642-SH, RNF167 shRNA Plasmid (m): sc-153023-SH, RNF167 shRNA (h) Lentiviral Particles: sc-93642-V and RNF167 shRNA (m) Lentiviral Particles: sc-153023-V.

Molecular Weight of RNF167: 38 kDa.

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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.