

RNF5 (G-15): sc-169211

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. RNF5 (ring finger protein 5), also known as RMA1, NG2, G16 or RING5, is a 180 amino acid protein that localizes to the membrane and contains one RING-type zinc finger. Expressed in a wide variety of tissues, RNF5 functions as a ubiquitin ligase that can regulate cell motility by controlling the ubiquitination of paxillin, a focal adhesion phosphoprotein that is localized to the cytoskeleton. RNF5 can target paxillin for ubiquitination, thereby altering the localization of paxillin and effecting its ability to recruit signaling molecules to focal adhesions. While overexpression of RNF5 is associated with the progression of breast cancer, lowered expression levels are observed in muscular disorders, indicating an important role for RNF5 in the regulation of cytoskeletal activity.

REFERENCES

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- Didier, C., et al. 2003. RNF5, a RING finger protein that regulates cell motility by targeting paxillin ubiquitination and altered localization. *Mol. Cell. Biol.* 23: 5331-5345.

CHROMOSOMAL LOCATION

Genetic locus: RNF5 (human) mapping to 6p21.32; Rnf5 (mouse) mapping to 17 B1.

SOURCE

RNF5 (G-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of RNF5 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-169211 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-169211 X, 200 µg/0.1 ml.

APPLICATIONS

RNF5 (G-15) is recommended for detection of RNF5 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.

RNF5 (G-15) is also recommended for detection of RNF5 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for RNF5 siRNA (h): sc-95209, RNF5 siRNA (m): sc-106983, RNF5 shRNA Plasmid (h): sc-95209-SH, RNF5 shRNA Plasmid (m): sc-106983-SH, RNF5 shRNA (h) Lentiviral Particles: sc-95209-V and RNF5 shRNA (m) Lentiviral Particles: sc-106983-V.

RNF5 (G-15) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of RNF5: 18 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or MCF7 whole cell lysate: sc-2206.

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.

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.


 MONOS
 Satisfaction
 Guaranteed

Try **RNF5 (22B3): sc-81716**, our highly recommended monoclonal alternative to RNF5 (G-15). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **RNF5 (22B3): sc-81716**.