SANTA CRUZ BIOTECHNOLOGY, INC.

RNF11 (C-12): sc-160748



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. RNF11 (RING finger protein 11), also known as CGI-123, is a 154 amino acid protein that contains one RING-type zinc finger through which it interacts with a variety of proteins. Specifically, RNF11 associates with NEDD4 (an E3 ubiquitin-protein ligase) and EGFR (epidermal growth factor receptor) and may regulate the function of these proteins. Via its ability to control the activity of growth-associated proteins, such as EGFR, RNF11 is associated with the pathogenesis of endocrine neoplasia, Parkinson's disease and breast cancer.

REFERENCES

- 1. Seki, N., Hattori, A., Hayashi, A., Kozuma, S., Sasaki, M., Suzuki, Y., Sugano, S., Muramatsu, M.A. and Saito, T. 1999. Cloning and expression profile of mouse and human genes, Rnf11/RNF11, encoding a novel RING-H2 finger protein. Biochim. Biophys. Acta 1489: 421-427.
- 2. Jolliffe, C.N., Harvey, K.F., Haines, B.P., Parasivam, G. and Kumar, S. 2000. Identification of multiple proteins expressed in murine embryos as binding partners for the WW domains of the ubiguitin-protein ligase Nedd4. Biochem, J. 351: 557-565.
- 3. Kitching, R., Wong, M.J., Koehler, D., Burger, A.M., Landberg, G., Gish, G. and Seth, A. 2003. The RING-H2 protein RNF11 is differentially expressed in breast tumours and interacts with HECT-type E3 ligases. Biochim. Biophys. Acta 1639: 104-112.
- 4. Subramaniam, V., Li, H., Wong, M., Kitching, R., Attisano, L., Wrana, J., Zubovits, J., Burger, A.M. and Seth, A. 2003. The RING-H2 protein RNF11 is overexpressed in breast cancer and is a target of Smurf2 E3 ligase. Br. J. Cancer 88: 1538-1544.
- 5. Li, H. and Seth, A. 2004. An RNF11: Smurf2 complex mediates ubiquitination of the AMSH protein. Oncogene 23: 1801-1808.
- 6. Connor, M.K., Azmi, P.B., Subramaniam, V., Li, H. and Seth, A. 2005. Molecular characterization of ring finger protein 11. Mol. Cancer Res. 3: 453-461.
- 7. Burger, A., Amemiya, Y., Kitching, R. and Seth, A.K. 2006. Novel RING E3 ubiquitin ligases in breast cancer. Neoplasia 8: 689-695.
- 8. Anderson, L.R., Betarbet, R., Gearing, M., Gulcher, J., Hicks, A.A., Stefánsson, K., Lah, J.J. and Levey, A.I. 2007. PARK10 candidate RNF11 is expressed by vulnerable neurons and localizes to Lewy bodies in Parkinson disease brain. J. Neuropathol. Exp. Neurol. 66: 955-964.
- 9. Chen, C., Zhou, Z., Liu, R., Li, Y., Azmi, P.B. and Seth, A.K. 2008. The WW domain containing E3 ubiquitin protein ligase 1 upregulates ErbB2 and EGFR through RING finger protein 11. Oncogene 27: 6845-6855.

CHROMOSOMAL LOCATION

Genetic locus: RNF11 (human) mapping to 1p32.3; Rnf11 (mouse) mapping to 4 C7.

SOURCE

RNF11 (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of RNF11 of human origin.

PRODUCT

Each vial contains 200 µg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-160748 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

RNF11 (C-12) is recommended for detection of RNF11 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 RNF family members.

RNF11 (C-12) is also recommended for detection of RNF11 in additional species, including equine, canine and avian.

Suitable for use as control antibody for RNF11 siRNA (h): sc-78665, RNF11 siRNA (m): sc-153001, RNF11 shRNA Plasmid (h): sc-78665-SH, RNF11 shRNA Plasmid (m): sc-153001-SH, RNF11 shRNA (h) Lentiviral Particles: sc-78665-V and RNF11 shRNA (m) Lentiviral Particles: sc-153001-V.

Molecular Weight of RNF11: 17 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.

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.

MONOS Satisfation Guaranteed

Try RNF11 (4G7): sc-517151, our highly recommended monoclonal alternative to RNF11 (C-12).