SANTA CRUZ BIOTECHNOLOGY, INC.

RNF39 (E-19): sc-169206

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The Power to Question

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. RNF39 (RING finger protein 39), also known as HZFW, HZF or LIRF, is a 420 amino acid protein that localizes to the cytoplasm and contains one RING-type zinc finger and one SPRY domain. Expressed in testis, RNF39 is thought to play a role in maintaining prolonged LTP (long term-potentiation, or the process by which synaptic strength continues to increases following chemical stimulation). Via its ability to influence the length of the LTP response, RNF39 functions to regulate early synaptic plasticity. Multiple isoforms of RNF39 exist due to alternative splicing events.

REFERENCES

1. Lepourcelet, M., et al. 1996. Systematic sequencing of the human HLA-A/HLA-F region: establishment of a cosmid contig and identification of a new gene cluster within 37 kb of sequence. Genomics 37: 316-326.
2. Orimo, A., et al. 2000. Molecular cloning of testis-abundant finger Protein/Ring finger protein 23 (RNF23), a novel RING-B box-coiled coil-B30.2 protein on the class I region of the human MHC. Biochem. Biophys. Res. Commun. 276: 45-51.
3. Coriton, O., et al. 2000. Transcriptional analysis of the 69-kb sequence centromeric to HLA-J: a dense and complex structure of five genes. Mamm. Genome 11: 1127-1131.
4. Hidaka, M., et al. 2000. Gene trapping of two novel genes, Hzf and Hhl, expressed in hematopoietic cells. Mech. Dev. 90: 3-15.
5. Matsuo, R., et al. 2001. LIRF, a gene induced during hippocampal long-term potentiation as an immediate-early gene, encodes a novel RING finger protein. Biochem. Biophys. Res. Commun. 289: 479-484.
6. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607524. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

CHROMOSOMAL LOCATION

Genetic locus: RNF39 (human) mapping to 6p22.1; Rnf39 (mouse) mapping to 17 B1.

SOURCE

RNF39 (E-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of RNF39 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.

PROTOCOLS

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

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-169206 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-169206 X, 200 µg/0.1 ml.

APPLICATIONS

RNF39 (E-19) is recommended for detection of RNF39 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.

RNF39 (E-19) is also recommended for detection of RNF39 in additional species, including canine and porcine.

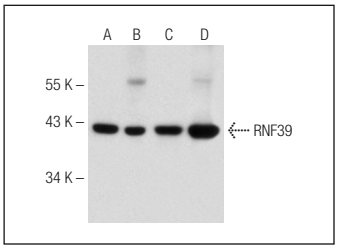
Suitable for use as control antibody for RNF39 siRNA (h): sc-95580, RNF39 siRNA (m): sc-153049, RNF39 shRNA Plasmid (h): sc-95580-SH, RNF39 shRNA Plasmid (m): sc-153049-SH, RNF39 shRNA (h) Lentiviral Particles: sc-95580-V and RNF39 shRNA (m) Lentiviral Particles: sc-153049-V.

RNF39 (E-19) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

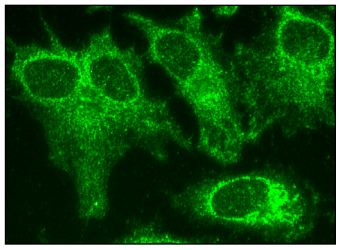
Molecular Weight of RNF39: 46 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, Jurkat whole cell lysate: sc-2204 or mouse brain extract: sc-2253.

DATA



RNF39 (E-19): sc-169206. Western blot analysis of RNF39 expression in Hep G2 (**A**) and Jurkat (**B**) whole cell lysates and human brain (**C**) and mouse brain (**D**) tissue extracts.



RNF39 (E-19): sc-169206. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

RESEARCH USE

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