SANTA CRUZ BIOTECHNOLOGY, INC.

RLIM (N-20): sc-55391

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

RLIM (RING finger LIM domain-binding protein), also known as RNF12 (RING finger protein 12) or NY-REN-43, is a 624 amino acid RING-H2 zinc finger protein that is involved in protein ubiquitinylation and subsequent degradation. Expressed in a variety of tissues, RLIM binds to the LIM domain of various proteins and functions as a protein ligase that negatively co-regulates LIM homeodomain (LIM-HD) transcription factors. Through its interaction with Sin3A, a component of the histone deacetylase corepressor complex, RLIM is able to recruit the corepressor complex to LIM-HD proteins, thereby inhibiting LIM-HD transcription. In addition to recruiting the deacetylase complex to LIM-HD proteins, RLIM is able to bind to, ubiquinate and subsequently degrade CLIM proteins, which function as positive co-regulators of LIM-HD transcription factors. RLIM contains one RING-type zinc finger and is implicated in renal cell carcinoma.

REFERENCES

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2. Bach, I., Rodriguez-Esteban, C., Carrière, C., Bhushan, A., Krones, A., Rose, D.W., Glass, C.K., Andersen, B., Izpisúa Belmonte, J.C. and Rosenfeld, M.G. 1999. RLIM inhibits functional activity of LIM homeodomain transcription factors via recruitment of the histone deacetylase complex. Nat. Genet. 22: 394-399.
3. Ostendorff, H.P., Bossenz, M., Mincheva, A., Copeland, N.G., Gilbert, D.J., Jenkins, N.A., Lichter, P. and Bach, I. 2000. Functional characterization of the gene encoding RLIM, the corepressor of LIM homeodomain factors. Genomics 69: 120-130.
4. Hiratani, I., Yamamoto, N., Mochizuki, T., Ohmori, S.Y. and Taira, M. 2003. Selective degradation of excess Ldb1 by RNF12/RLIM confers proper Ldb1 expression levels and Xlim-1/Ldb1 stoichiometry in *Xenopus* organizer functions. Development 130: 4161-4175.
5. Ostendorff, H.P., Tursun, B., Cornils, K., Schlüter, A., Drung, A., Güngör, C. and Bach, I. 2006. Dynamic expression of LIM cofactors in the developing mouse neural tube. Dev. Dyn. 235: 786-791.

CHROMOSOMAL LOCATION

Genetic locus: RLIM (human) mapping to Xq13.2.

SOURCE

RLIM (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of RLIM 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-55391 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

RLIM (N-20) is recommended for detection of RLIM of 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

RLIM (N-20) is also recommended for detection of RLIM in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for RLIM siRNA (h): sc-62952, RLIM shRNA Plasmid (h): sc-62952-SH and RLIM shRNA (h) Lentiviral Particles: sc-62952-V.

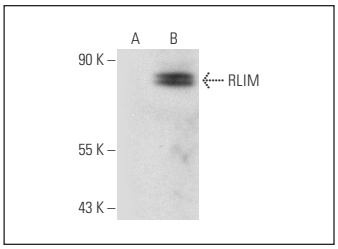
Molecular Weight of RLIM: 69 kDa.

Positive Controls: HeLa nuclear extract: sc-2120.

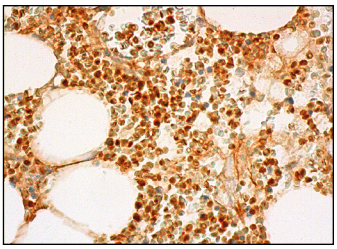
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



RLIM (N-20): sc-55391. Western blot analysis of RLIM expression in non-transfected: sc-117752 (**A**) and mouse RLIM transfected: sc-123216 (**B**) 293T whole cell lysates.



RLIM (N-20): sc-55391. Immunoperoxidase staining of formalin fixed, paraffin-embedded human bone marrow tissue showing nuclear and cytoplasmic staining of hematopoietic cells.

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.