SANTA CRUZ BIOTECHNOLOGY, INC.

Limd1 (N-20): sc-55845

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The Zyxin family of proteins contains five members: Ajuba, Limd1, LPP, TRIP6 and Zyxin. Limd1 (LIM domain-containing protein 1) is an ubiquitously expressed tumor suppressor containing three LIM zinc-binding domains. LIM domains consist of a cysteine-rich consensus sequence containing two distinct zinc-binding subdomains, which mediate protein-protein interactions. Limd1 interacts with the proteins SQSTM1, Rb, p62 and TRAF6. Limd1 was first iden-tified when the deletion of its gene was noted in some cervical cancers. Limd1 blocks *in vitro* and *in vivo* tumor growth and is downregulated in lung cancer. Limd1 may regulate osteoclast development under stressful conditions via its interactions with TRAF6 and p62.

REFERENCES

1. Kiss, H., et al. 2000. A novel gene containing LIM domains (Limd1) is located within the common eliminated region 1 (C3CER1) in 3p21.3. Hum. Genet. 105: 552-559.
2. Kholodnyuk, I.D., et al. 2001. Inactivation of the human fragile histidine triad gene at 3p14.2 in monochromosomal human/mouse microcell hybrid-derived severe combined immuno-deficient mouse tumors. Cancer Res. 60: 7119-7125.
3. Kiss, H., et al. 2001. The LZTFL1 gene is a part of a transcriptional map covering 250 kb within the common eliminated region 1 (C3CER1) in 3p21.3. Genomics 73: 10-19.
4. Sharp, T.V., et al. 2004. LIM domains-containing protein 1 (Limd1), a tumor suppressor encoded at chromosome 3p21.3, binds Rb and represses E2F-driven transcription. Proc. Natl. Acad. Sci. USA 101: 16531-16536.
5. Petit, M.M., et al. 2005. The tumor suppressor scrib selectively interacts with specific members of the Zyxin family of proteins. FEBS Lett. 579: 5061-5068.
6. Petit, M.M., et al. 2005. The tumor suppressor Scrib interacts with the Zyxin-related protein LPP, which shuttles between cell adhesion sites and the nucleus. BMC Cell Biol. 6: 1.

CHROMOSOMAL LOCATION

Genetic locus: LIMD1 (human) mapping to 3p21.31; Limd1 (mouse) mapping to 9 F4.

SOURCE

Limd1 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Limd1 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-55845 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

Limd1 (N-20) is recommended for detection of Limd1 of mouse 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).

Limd1 (N-20) is also recommended for detection of Limd1 in additional species, including canine, bovine and avian.

Suitable for use as control antibody for Limd1 siRNA (h): sc-62561, Limd1 siRNA (m): sc-62562, Limd1 shRNA Plasmid (h): sc-62561-SH, Limd1 shRNA Plasmid (m): sc-62562-SH, Limd1 shRNA (h) Lentiviral Particles: sc-62561-V and Limd1 shRNA (m) Lentiviral Particles: sc-62562-V.

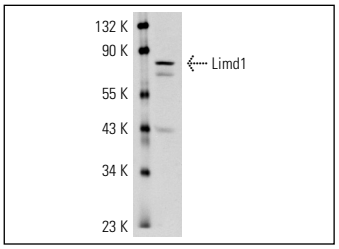
Molecular Weight of Limd1: 73 kDa.

Positive Controls: Y79 cell lysate: sc-2240.

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.

DATA



Limd1 (N-20): sc-55845. Western blot analysis of Limd1 expression in Y79 whole cell lysate.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.