

RIL (D-16): sc-324277

BACKGROUND

RIL (reversion-induced LIM protein), also known as PDZ and LIM domain protein 4, is a widely expressed 334 amino acid protein. RIL contains one PDZ(DHR) domain and one LIM zinc-binding domain. The LIM zinc-binding domain interacts with the second and fourth PDZ domains of Fap-1, possibly resulting in the dephosphorylation of RIL. Although an exact function is unknown, RIL expression in human bone marrow stromal cells suggests involvement in osteoblast development and function. Variations in the RIL gene have been shown to have an allelic dose effect on bone mineral density (BMD), with BMD being an important determinant of osteoporosis. RIL exists as two isoforms, with isoform 2 present in the brain.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PDLIM4 (human) mapping to 5q31.1; Pdlim4 (mouse) mapping to 11 B1.3.

SOURCE

RIL (D-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of RIL 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-324277 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

RIL (D-16) is recommended for detection of RIL 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 PDLIM family members.

RIL (D-16) is also recommended for detection of RIL in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for RIL siRNA (h): sc-91925, RIL siRNA (m): sc-152959, RIL shRNA Plasmid (h): sc-91925-SH, RIL shRNA Plasmid (m): sc-152959-SH, RIL shRNA (h) Lentiviral Particles: sc-91925-V and RIL shRNA (m) Lentiviral Particles: sc-152959-V.

Molecular Weight of RIL: 35 kDa.

Positive Controls: SK-N-SH cell lysate: sc-2410 or MIA PaCa-2 cell lysate: sc-2285.

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.