SANTA CRUZ BIOTECHNOLOGY, INC.

Otospiralin (L-13): sc-67729

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The Power to Question

BACKGROUND

Otospiralin is an 89 amino acid inner ear-specific protein ecoded by the OTOS gene. Otospiralin is synthesized by fibrocytes of spiral limbus and spiral ligament in the cochlea. Fibrocytes are responsible for maintaining inner ear homeostasis and impairment or alteration of these cells may lead to deterioration of auditory function. Degeneration of fibrocytes due to the absence of Otospiralin leads to irreversible deafness in guinea pigs and moderate deafness in mice. Loss of function in hair cells of the inner ear may also be caused by the downregulation of Otospiralin. Otospiralin is conserved from fish to mammals. It shares homology with Gag p30 core shell and SARS of type C retroviruses. One isoform is produced due to alternative splicing.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: OTOS (human) mapping to 2q37.3; Otos (mouse) mapping to 1 D.

SOURCE

Otospiralin (L-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Otospiralin 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.

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-67729 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Otospiralin (L-13) is recommended for detection of Otospiralin 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).

Otospiralin (L-13) is also recommended for detection of Otospiralin in additional species, including bovine and porcine.

Suitable for use as control antibody for Otospiralin siRNA (h): sc-62725, Otospiralin siRNA (m): sc-62726, Otospiralin shRNA Plasmid (h): sc-62725-SH, Otospiralin shRNA Plasmid (m): sc-62726-SH, Otospiralin shRNA (h) Lentiviral Particles: sc-62725-V and Otospiralin shRNA (m) Lentiviral Particles: sc-62726-V.

Molecular Weight of Otospiralin: 6 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.

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.