

β-tectorin (S-13): sc-165671

BACKGROUND

β-tectorin, also known as TECTB, is a 329 amino acid secreted protein that contains one zona pellucida (ZP) domain. While it may form homomeric filaments after self-association, β-tectorin may also form heteromeric filaments when it associates with α-tectorin. The presence of a hydrophobic C-terminus preceded by a potential cleavage site strongly suggests that tectorins are synthesized as glycosylphosphatidylinositol-linked, membrane-bound precursors. Tectorins are targeted to the apical surface of the inner ear epithelia and proteolytically released into the extracellular compartment. β-tectorin is one of the major non-collagenous components of the tectorial membrane. The tectorial membrane is an extracellular matrix of the inner ear that covers the neuroepithelium of the cochlea and contacts the stereocilia bundles of specialized sensory hair cells. Sound induces movement of these hair cells relative to the tectorial membrane, deflects the stereocilia and leads to fluctuations in hair-cell membrane potential, transducing sound into electrical signals.

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CHROMOSOMAL LOCATION

Genetic locus: TECTB (human) mapping to 10q25.2; Tectb (mouse) mapping to 19 D2.

SOURCE

β-tectorin (S-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of β-tectorin 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-165671 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

β-tectorin (S-13) is recommended for detection of β-tectorin 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 α-tectorin.

β-tectorin (S-13) is also recommended for detection of β-tectorin in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for β-tectorin siRNA (h): sc-90621, β-tectorin siRNA (m): sc-154175, β-tectorin shRNA Plasmid (h): sc-90621-SH, β-tectorin shRNA Plasmid (m): sc-154175-SH, β-tectorin shRNA (h) Lentiviral Particles: sc-90621-V and β-tectorin shRNA (m) Lentiviral Particles: sc-154175-V.

Molecular Weight of β-tectorin: 36 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.

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.