

CGNL1 (C-14): sc-162681

BACKGROUND

Diffusion of solutes is prevented across certain barriers by the formation of tight junction seals. Occludin and Cingulin interact with other proteins to direct the formation and regulation of tight junctions. Cingulin, a protein component of the submembrane plaque of tight junctions (TJ), contains globular and coiled-coil domains and interacts *in vitro* with several TJ and cytoskeletal proteins, including the PDZ protein ZO-1. CGNL1 (cingulin-like 1), also known as JACOP (junction-associated coiled-coil protein), is a 1,302 amino acid tight junction protein belonging to the Cingulin family. Expressed in smooth muscle, spleen, testis, fetal brain, amygdala, corpus callosum, cerebellum, thalamus and subthalamic nucleus of adult brain. CGNL1 exists as two alternatively spliced isoforms and is encoded by a gene located on human chromosome 15q21.3. CGNL1 may participate in anchoring the apical junctional complex, primarily tight junctions, to actin-based cytoskeletons. Mutations in the gene encoding CGNL1 is the cause of aromatase excess syndrome, which is characterized by an estrogen excess due to an increased aromatase activity.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CGNL1 (human) mapping to 15q21.3; Cgnl1 (mouse) mapping to 9 D.

RESEARCH USE

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

SOURCE

CGNL1 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of CGNL1 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-162681 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

CGNL1 (C-14) is recommended for detection of CGNL1 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).

CGNL1 (C-14) is also recommended for detection of CGNL1 in additional species, including equine and porcine.

Suitable for use as control antibody for CGNL1 siRNA (h): sc-90135, CGNL1 siRNA (m): sc-142307, CGNL1 shRNA Plasmid (h): sc-90135-SH, CGNL1 shRNA Plasmid (m): sc-142307-SH, CGNL1 shRNA (h) Lentiviral Particles: sc-90135-V and CGNL1 shRNA (m) Lentiviral Particles: sc-142307-V.

Molecular Weight of CGNL1: 149 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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.