

CLDND1 (T-20): sc-99348

BACKGROUND

CLDND1 (claudin domain containing 1), also known as C3orf4 or HSPC174, is a 253 amino acid multi-pass membrane protein that is expressed at high levels in adult brain and at lower levels in adult heart. Existing as two alternatively spliced isoforms, CLDND1 is encoded by a gene that maps to human chromosome 3, which houses over 1,100 genes, including a chemokine receptor (CKR) gene cluster and a variety of human cancer-related gene loci. Key tumor suppressing genes on chromosome 3 include those that encode the apoptosis mediator RASSF1, the cell migration regulator HYAL1 and the angiogenesis suppressor SEMA3B. Marfan syndrome, porphyria, von Hippel-Lindau syndrome, osteogenesis imperfecta and Charcot-Marie-Tooth disease are a few of the numerous genetic diseases associated with chromosome 3.

REFERENCES

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- Tsend-Ayush, E., et al. 2004. Plasticity of human chromosome 3 during primate evolution. *Genomics* 83: 193-202.
- Yue, Y., et al. 2005. Comparative cytogenetics of human chromosome 3q21.3 reveals a hot spot for ectopic recombination in hominoid evolution. *Genomics* 85: 36-47.
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- Muzny, D.M., et al. 2006. The DNA sequence, annotation and analysis of human chromosome 3. *Nature* 440: 1194-1198.

CHROMOSOMAL LOCATION

Genetic locus: CLDND1 (human) mapping to 3q11.2; Cldn25 (mouse) mapping to 16 C1.2.

SOURCE

CLDND1 (T-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of CLDND1 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-99348 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

CLDND1 (T-20) is recommended for detection of CLDND1 of mouse 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).

CLDND1 (T-20) is also recommended for detection of CLDND1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for CLDND1 siRNA (h): sc-78078, CLDND1 siRNA (m): sc-142374, CLDND1 shRNA Plasmid (h): sc-78078-SH, CLDND1 shRNA Plasmid (m): sc-142374-SH, CLDND1 shRNA (h) Lentiviral Particles: sc-78078-V and CLDND1 shRNA (m) Lentiviral Particles: sc-142374-V.

Molecular Weight of CLDND1: 29 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.