

CACHD1 (U-25): sc-133435

BACKGROUND

CACHD1 (cache domain containing 1), also known as VWCD1, is a 1,274 amino acid single-pass type I membrane protein belonging to the calcium channel subunit alpha-2/delta family. Containing two cache domains and a VWFA (von Willebrand factor A) domain, CACHD1 is suggested to be involved in the regulation of voltage-dependent calcium channels. Existing as two isoforms produced by alternative splicing, CACHD1 is encoded by a gene located on human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome. Chromosome 1 houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome. Aberrations in chromosome 1 are found in a variety of cancers, including head and neck cancer, malignant melanoma and multiple myeloma.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CACHD1 (human) mapping to 1p31.3; Cachd1 (mouse) mapping to 4 C6.

SOURCE

CACHD1 (U-25) is an affinity purified rabbit polyclonal antibody raised against synthetic CACHD1 peptide of human origin.

PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

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.

APPLICATIONS

CACHD1 (U-25) is recommended for detection of CACHD1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CACHD1 siRNA (h): sc-88664, CACHD1 siRNA (m): sc-141967, CACHD1 shRNA Plasmid (h): sc-88664-SH, CACHD1 shRNA Plasmid (m): sc-141967-SH, CACHD1 shRNA (h) Lentiviral Particles: sc-88664-V and CACHD1 shRNA (m) Lentiviral Particles: sc-141967-V.

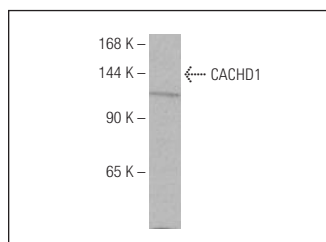
Molecular Weight of CACHD1: 142 kDa.

Positive Controls: human fetal brain tissue extract.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



CACHD1 (U-25): sc-133435. Western blot analysis of CACHD1 expression in human fetal brain tissue extract.

PROTOCOLS

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