

# CACHD1 (K-14): sc-162623

## 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 (K-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal extracellular domain of CACHD1 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-162623 P, (100  $\mu$ g 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

CACHD1 (K-14) 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), 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).

CACHD1 (K-14) is also recommended for detection of CACHD1 in additional species, including equine, canine, bovine, porcine and avian.

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.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.