

COMMD5 (N-14): sc-87653

BACKGROUND

COMMD family members are a group of evolutionary conserved proteins that share a common COMM domain at the extreme C-terminus, which provides an interface for protein-protein interactions. Most, if not all, COMMD proteins have been found to play a role in the regulation of NF κ B and, despite their similarities, seem to function in unique and non-redundant pathways. COMMD proteins may also play a role in the function of epithelial sodium channels, cell proliferation, copper homeostasis and in the regulation of the ubiquitin pathway. As a member of the COMMD family, COMMD5 (COMM domain-containing protein 5), also known as HCaRG (hypertension-related calcium-regulated gene protein), is a 224 amino acid protein that is negatively regulated by extracellular calcium concentrations. Due to lower proliferation rates observed in COMMD5-transfected HEK293 cells, it is suggested that COMMD5 may play a regulatory role in cell proliferation. COMMD5 is localized to the nucleus and is expressed in stomach, liver, kidney, heart, adrenal gland and jejunum, with higher levels of mRNA expression found in hypertensive animals.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: COMMD5 (human) mapping to 8q24.3; Commd5 (mouse) mapping to 15 D3.

SOURCE

COMMD5 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of COMMD5 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-87653 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

COMMD5 (N-14) is recommended for detection of COMMD5 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 other COMMD family members.

COMMD5 (N-14) is also recommended for detection of COMMD5 in additional species, including equine and porcine.

Suitable for use as control antibody for COMMD5 siRNA (h): sc-77657, COMMD5 siRNA (m): sc-142486, COMMD5 shRNA Plasmid (h): sc-77657-SH, COMMD5 shRNA Plasmid (m): sc-142486-SH, COMMD5 shRNA (h) Lentiviral Particles: sc-77657-V and COMMD5 shRNA (m) Lentiviral Particles: sc-142486-V.

Molecular Weight of COMMD5: 27 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.