# COMMD4 (N-12): sc-104154



The Power to Question

## **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. Of the ten family members, the role of COMMD1, also known as MURR1, is best characterized, functioning to inhibit TNF-induced NF $\kappa$ B p50 and to facilitate biliary copper excretion within hepatocytes. Most, if not all, COMMD proteins have been found to play a role in the regulation NF $\kappa$ 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. COMMD4 is a 199 amino acid member of the COMMD family. Two named isoforms of COMMD4 exist as a result of alternative splicing events.

# **REFERENCES**

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- 4. Burstein, E., et al. 2005. COMMD proteins, a novel family of structural and functional homologs of MURR1. J. Biol. Chem. 280: 22222-22232.
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- 8. Sommerhalter, M., et al. 2007. Solution structure of the COMMD1 N-terminal domain. J. Mol. Biol. 365: 715-721.

# **CHROMOSOMAL LOCATION**

Genetic locus: COMMD4 (human) mapping to 15q24.2; Commd4 (mouse) mapping to 9 B.

## SOURCE

COMMD4 (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of COMMD4 of human origin.

# **PRODUCT**

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

Blocking peptide available for competition studies, sc-104154 P, (100  $\mu g$  peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

COMMD4 (N-12) is recommended for detection of COMMD4 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], 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).

COMMD4 (N-12) is also recommended for detection of COMMD4 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for COMMD4 siRNA (h): sc-90146, COMMD4 siRNA (m): sc-105230, COMMD4 shRNA Plasmid (h): sc-90146-SH, COMMD4 shRNA Plasmid (m): sc-105230-SH, COMMD4 shRNA (h) Lentiviral Particles: sc-90146-V and COMMD4 shRNA (m) Lentiviral Particles: sc-105230-V.

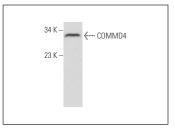
Molecular Weight of COMMD4: 22 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210.

#### **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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

### DATA



COMMD4 (N-12): sc-104154. Western blot analysis of COMMD4 expression in NIH/3T3 whole cell lysate.

# **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.

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