

COMMD2 (N-12): sc-99852

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 κ 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 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, COMMD2 (COMM domain-containing protein 2) is a 199 amino acid protein containing the characteristic COMM domain at its C-terminus.

REFERENCES

1. Burstein, E., et al. 2005. COMMD proteins, a novel family of structural and functional homologs of MURR1. *J. Biol. Chem.* 280: 22222-22232.
2. de Bie, P., et al. 2006. Characterization of COMMD protein-protein interactions in NF κ B signalling. *Biochem. J.* 398: 63-71.
3. Maine, G.N., et al. 2007. COMMD proteins and the control of the NF κ B pathway. *Cell Cycle* 6: 672-676.
4. Maine, G.N., et al. 2007. COMMD proteins: COMMDing to the scene. *Cell. Mol. Life Sci.* 64: 1997-2005.
5. van de Sluis, B., et al. 2007. Increased activity of hypoxia-inducible factor 1 is associated with early embryonic lethality in Commd1 null mice. *Mol. Cell. Biol.* 27: 4142-4156.
6. Maine, G.N., et al. 2008. COMMD1 expression is controlled by critical residues that determine XIAP binding. *Biochem. J.* 417: 601-609.
7. Burkhead, J.L., et al. 2008. COMMD1 forms oligomeric complexes targeted to the endocytic membranes via specific interactions with PtdIns(4,5)p₂. *J. Biol. Chem.* 284: 696-707.

CHROMOSOMAL LOCATION

Genetic locus: COMMD2 (human) mapping to 3q25.1; Commd2 (mouse) mapping to 3 D.

SOURCE

COMMD2 (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of COMMD2 of human origin.

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.

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-99852 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

COMMD2 (N-12) is recommended for detection of COMMD2 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.

COMMD2 (N-12) is also recommended for detection of COMMD2 in additional species, including equine.

Suitable for use as control antibody for COMMD2 siRNA (h): sc-78332, COMMD2 siRNA (m): sc-142484, COMMD2 shRNA Plasmid (h): sc-78332-SH, COMMD2 shRNA Plasmid (m): sc-142484-SH, COMMD2 shRNA (h) Lentiviral Particles: sc-78332-V and COMMD2 shRNA (m) Lentiviral Particles: sc-142484-V.

Molecular Weight of COMMD2: 23 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.

RESEARCH USE

For research use only, not for use in diagnostic procedures.