



# COMMMD6 (N-14): sc-84239

## BACKGROUND

COMMMD 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 COMMMD1, 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, COMMMD 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. COMMMD 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 COMMMD family, COMMMD6 (COMM domain-containing protein 6) is an 85 amino acid protein that interacts directly with COMMMD1. With expression in lung, skeletal muscle, liver, kidney, pancreas, small intestine, placenta, brain and heart, COMMMD6 is localized to the cytoplasm and the nucleus.

## REFERENCES

- Burstein, E., Hoberg, J.E., Wilkinson, A.S., Rumble, J.M., Csomos, R.A., Komarck, C.M., Maine, G.N., Wilkinson, J.C., Mayo, M.W. and Duckett, C.S. 2005. COMMMD proteins, a novel family of structural and functional homologs of MURR1. *J. Biol. Chem.* 280: 22222-22232.
- de Bie, P., van de Sluis, B., Burstein, E., Duran, K.J., Berger, R., Duckett, C.S., Wijmenga, C. and Klomp, L.W. 2006. Characterization of COMMMD protein-protein interactions in NF $\kappa$ B signalling. *Biochem. J.* 398: 63-71.
- Maine, G.N. and Burstein, E. 2007. COMMMD proteins and the control of the NF $\kappa$ B pathway. *Cell Cycle.* 6: 672-676.
- Maine, G.N. and Burstein, E. 2007. COMMMD proteins: COMMing to the scene. *Cell. Mol. Life Sci.* 64: 1997-2005.
- van de Sluis, B., Muller, P., Duran, K., Chen, A., Groot, A.J., Klomp, L.W., Liu, P.P. and Wijmenga, C. 2007. Increased activity of hypoxia-inducible factor 1 is associated with early embryonic lethality in Commmd1 null mice. *Mol. Cell. Biol.* 27: 4142-4156.
- Maine, G.N., Mao, X., Muller, P.A., Komarck, C.M., Klomp, L.W. and Burstein, E. 2008. COMMMD1 expression is controlled by critical residues that determine XIAP binding. *Biochem. J.* 417: 601-609.
- Burkhead, J.L., Morgan, C.T., Shinde, U., Haddock, G. and Lutsenko, S. 2008. COMMMD1 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: COMMMD6 (human) mapping to 13q22.2.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## SOURCE

COMMMD6 (N-14) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the N-terminus of COMMMD6 of human origin.

## PRODUCT

Each vial contains 100  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-84239 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

COMMMD6 (N-14) is recommended for detection of COMMMD6 of 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).

Suitable for use as control antibody for COMMMD6 siRNA (h): sc-72966, COMMMD6 shRNA Plasmid (h): sc-72966-SH and COMMMD6 shRNA (h) Lentiviral Particles: sc-72966-V.

Molecular Weight of COMMMD6: 8 kDa.

## 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) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.