SANTA CRUZ BIOTECHNOLOGY, INC.

COMMD8 (D-7): sc-514188

SANTA CRUZ BIOTECHNOLOGY

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 NFκB 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 NFκB 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, COMM domain containing protein 8 is a 183 amino acid protein that is widely expressed with highest expression in thyroid.

REFERENCES

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2. 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 COMMD protein-protein interactions in NFκB signalling. Biochem. J. 398: 63-71.
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7. Burkhead, J.L., Morgan, C.T., Shinde, U., Haddock, G. and Lutsenko, S. 2008. COMMD1 forms oligomeric complexes targeted to the endocytic membranes via specific interactions with phosphatidylinositol 4,5-bisphosphate. J. Biol. Chem. 284: 696-707.

CHROMOSOMAL LOCATION

Genetic locus: Commd8 (mouse) mapping to 5 C3.2.

SOURCE

COMMD8 (D-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 33-56 within an internal region of COMMD8 of mouse origin.

STORAGE

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

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-514188 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

COMMD8 (D-7) is recommended for detection of COMMD8 of mouse and rat origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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).

Suitable for use as control antibody for COMMD8 siRNA (m): sc-105231, COMMD8 shRNA Plasmid (m): sc-105231-SH and COMMD8 shRNA (m) Lentiviral Particles: sc-105231-V.

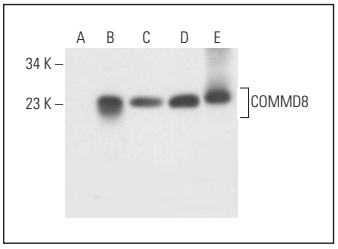
Molecular Weight of COMMD8: 21 kDa.

Positive Controls: COMMD8 (m): 293T Lysate: sc-119380, NIH/3T3 whole cell lysate: sc-2210 or KNRK whole cell lysate: sc-2214.

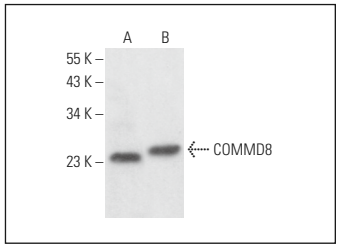
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



COMMD8 (D-7): sc-514188. Western blot analysis of COMMD8 expression in non-transfected 293T: sc-117752 (**A**), mouse COMMD8 transfected 293T: sc-119380 (**B**), NIH/3T3 (**C**) and KNRK (**D**) whole cell lysates and mouse kidney tissue extract (**E**).



COMMD8 (D-7): sc-514188. Western blot analysis of COMMD8 expression in KNRK (**A**) and C3H/10T1/2 (**B**) whole cell lysates.

RESEARCH USE

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