SANTA CRUZ BIOTECHNOLOGY, INC.

COMMD8 (F-1): sc-373869

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

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 NFκB signalling. Biochem. J. 398: 63-71.
3. Maine, G.N. and Burstein, E. 2007. COMMD proteins and the control of the NFκB pathway. Cell Cycle 6: 672-676.
4. Maine, G.N. and Burstein, E. 2007. COMMD proteins: COMMing to the scene. Cell. Mol. Life Sci. 64: 1997-2005.

CHROMOSOMAL LOCATION

Genetic locus: COMMD8 (human) mapping to 4p12; Commd8 (mouse) mapping to 5 C3.2.

SOURCE

COMMD8 (F-1) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 4-25 at the N-terminus of COMMD8 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

COMMD8 (F-1) is available conjugated to agarose (sc-373869 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-373869 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-373869 PE), fluorescein (sc-373869 FITC), Alexa Fluor® 488 (sc-373869 AF488), Alexa Fluor® 546 (sc-373869 AF546), Alexa Fluor® 594 (sc-373869 AF594) or Alexa Fluor® 647 (sc-373869 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-373869 AF680) or Alexa Fluor® 790 (sc-373869 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-373869 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

COMMD8 (F-1) is recommended for detection of COMMD8 of mouse, rat and human 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).

COMMD8 (F-1) is also recommended for detection of COMMD8 in additional species, including bovine and porcine.

Suitable for use as control antibody for COMMD8 siRNA (h): sc-89035, COMMD8 siRNA (m): sc-105231, COMMD8 shRNA Plasmid (h): sc-89035-SH, COMMD8 shRNA Plasmid (m): sc-105231-SH, COMMD8 shRNA (h) Lentiviral Particles: sc-89035-V and COMMD8 shRNA (m) Lentiviral Particles: sc-105231-V.

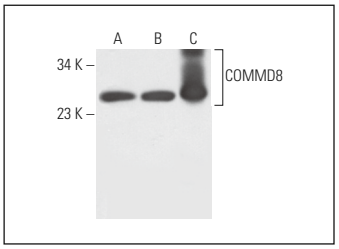
Molecular Weight of COMMD8: 21 kDa.

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

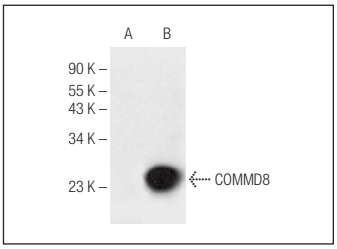
RECOMMENDED SUPPORT REAGENTS

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 (F-1): sc-373869. Western blot analysis of COMMD8 expression in NIH/3T3 (**A**) and KNRK (**B**) whole cell lysates and mouse kidney tissue extract (**C**).



COMMD8 (F-1): sc-373869. Western blot analysis of COMMD8 expression in non-transfected: sc-117752 (**A**) and mouse COMMD8 transfected: sc-119380 (**B**) 293T whole cell lysates.

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.