SANTA CRUZ BIOTECHNOLOGY, INC.

COMMD10 (F-4): sc-398798



BACKGROUND

The COMMD family represents a group of evolutionary conserved proteins that share a common COMM domain at their extreme C-terminus, which provides an interface for protein-protein interactions. COMMD10 (COMM domain containing 10), also known as PTD002 or HSPC305, is a 202 amino acid protein that belongs to the COMMD family and contains one COMM domain. The gene encoding COMMD10 maps to human chromosome 5, which contains 181 million base pairs and comprises nearly 6% of the human genome. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome, while deletion of the q arm or of chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

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.
- Murru, D., et al. 2008. Cri du chat mosaicism: an unusual case of partial deletion and partial deletion/duplication of the short arm of chromosome 5, leading to an unusual Cri du chat phenotype. Genet. Couns. 19: 381-386.
- Sazawal, S., et al. 2009. Haematological & molecular profile of acute myelogenous leukaemia in India. Indian J. Med. Res. 129: 256-261.
- Eisenmann, K.M., et al. 2009. 5q- myelodysplastic syndromes: chromosome 5q genes direct a tumor-suppression network sensing Actin dynamics. Oncogene 28: 3429-3441.
- Wang, J.C. and Khan, A. 2010. Large distal 5p deletion with hemifacial microsomia and absence of Cri-du-chat syndrome. Clin. Dysmorphol. 19: 38-39.
- Yamamoto, K., et al. 2010. Two further cases of myelodysplastic syndrome and acute myeloid leukemia with der(5;19)(p10;q10): association with abnormalities involving chromosomes 12 and 21. Leuk. Res. 34: e38-e41.

CHROMOSOMAL LOCATION

Genetic locus: COMMD10 (human) mapping to 5q23.1.

SOURCE

COMMD10 (F-4) is a mouse monoclonal antibody raised against amino acids 96-202 mapping at the C-terminus of COMMD10 of human origin.

PRODUCT

Each vial contains 200 μg lgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

COMMD10 (F-4) is available conjugated to agarose (sc-398798 AC), 500 μ g/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-398798 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398798 PE), fluorescein (sc-398798 FITC), Alexa Fluor[®] 488 (sc-398798 AF488), Alexa Fluor[®] 546 (sc-398798 AF546), Alexa Fluor[®] 594 (sc-398798 AF594) or Alexa Fluor[®] 647 (sc-398798 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-398798 AF680) or Alexa Fluor[®] 790 (sc-398798 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

COMMD10 (F-4) is recommended for detection of COMMD10 of 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).

Suitable for use as control antibody for COMMD10 siRNA (h): sc-91768, COMMD10 shRNA Plasmid (h): sc-91768-SH and COMMD10 shRNA (h) Lentiviral Particles: sc-91768-V.

Molecular Weight of COMMD10: 23 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Hep G2 cell lysate: sc-2227 or human kidney extract: sc-363764.

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





COMMD10 (F-4): sc-398798. Western blot analysis of COMMD10 expression in human bladder (A) and human kidney (B) tissue extracts and HeLa (C) and Hep G2 (D) whole cell lysates.

COMMD10 (F-4): sc-398798. Western blot analysis of COMMD10 expression in Hep G2 (\pmb{A}), THP-1 (\pmb{B}) and K-562 (\pmb{C}) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Healy, M.D., et al. 2023. Structure of the endosomal Commander complex linked to Ritscher-Schinzel syndrome. Cell 186: 2219-2237.e29.

STORAGE

Store at 4° C, **D0 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.