

ZNF2 (C-2): sc-515483



The Power to Question

BACKGROUND

Zinc-finger proteins contain DNA-binding domains and have a wide variety of functions, most of which encompass some form of transcriptional activation or repression. The majority of zinc-finger proteins contain a Krüppel-type DNA binding domain and a KRAB domain, which is thought to interact with KAP1, thereby recruiting histone modifying proteins. As a member of the Krüppel C₂H₂-type zinc-finger protein family, ZNF2 (zinc finger protein 2), also known as zinc finger protein 2.2 and zinc finger protein 661, is a 425 amino acid nuclear protein that contains one KRAB domain and 9 C₂H₂-type zinc fingers. The gene encoding ZNF2 maps to human chromosome 2q11.1, which houses over 1,400 genes and comprises nearly 8% of the human genome. Harlequin ichthyosis, a rare and morbid skin deformity, is associated with mutations in the chromosome 2-localized ABCA12 gene, while the lipid metabolic disorder sitosterolemia is associated with defects in the ABCG5 and ABCG8 genes, which also map to chromosome 2.

REFERENCES

1. Miller, J., et al. 1985. Repetitive zinc-binding domains in the protein transcription factor IIIA from *Xenopus* oocytes. *EMBO J.* 4: 1609-1614.
2. Rosati, M., et al. 1991. Members of the zinc finger protein gene family sharing a conserved N-terminal module. *Nucleic Acids Res.* 19: 5661-5667.
3. Rocchi, M., et al. 1999. The human KRAB/FPB containing zinc finger gene ZNF2 maps to chromosome 2q11.2. *Cytogenet. Cell Genet.* 86: 305-306.
4. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 194500. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
5. Riviello, V., et al. 2005. Expression, purification and partial characterization of the Krüppel-associated box (KRAB) from the human ZNF2 protein. *Protein Pept. Lett.* 12: 527-532.

CHROMOSOMAL LOCATION

Genetic locus: ZNF2 (human) mapping to 2q11.1; Zfp661 (mouse) mapping to 2 F1.

SOURCE

ZNF2 (C-2) is a mouse monoclonal antibody raised against amino acids 345-425 mapping at the C-terminus of ZNF2 of human origin.

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.

ZNF2 (C-2) is available conjugated to agarose (sc-515483 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515483 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515483 PE), fluorescein (sc-515483 FITC), Alexa Fluor® 488 (sc-515483 AF488), Alexa Fluor® 546 (sc-515483 AF546), Alexa Fluor® 594 (sc-515483 AF594) or Alexa Fluor® 647 (sc-515483 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515483 AF680) or Alexa Fluor® 790 (sc-515483 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

ZNF2 (C-2) is recommended for detection of ZNF2 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).

Suitable for use as control antibody for ZNF2 siRNA (h): sc-94869, ZNF2 siRNA (m): sc-155651, ZNF2 shRNA Plasmid (h): sc-94869-SH, ZNF2 shRNA Plasmid (m): sc-155651-SH, ZNF2 shRNA (h) Lentiviral Particles: sc-94869-V and ZNF2 shRNA (m) Lentiviral Particles: sc-155651-V.

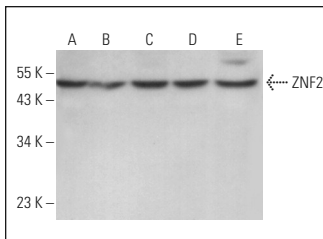
Molecular Weight of ZNF2: 49 kDa.

Positive Controls: A-10 cell lysate: sc-3806, NIH/3T3 whole cell lysate: sc-2210 or C2C12 whole cell lysate: sc-364188.

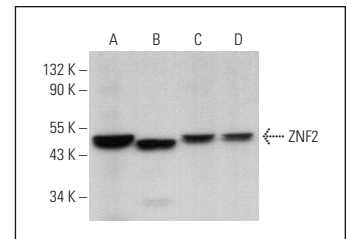
RECOMMENDED SUPPORT REAGENTS

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



ZNF2 (C-2): sc-515483. Western blot analysis of ZNF2 expression in A-10 (A), C2C12 (B), NIH/3T3 (C), HEL 92.1.7 (D) and U-251-MG (E) whole cell lysates.



ZNF2 (C-2): sc-515483. Western blot analysis of ZNF2 expression in rat heart (A), mouse heart (B), rat postnatal heart (C) and mouse postnatal heart (D) tissue extracts. Detection reagent used: m-IgGκ BP-HRP: sc-516102.

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.

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