

Zimp10 (G-12): sc-376825

BACKGROUND

Zimp10, also known as ZMIZ1 (zinc finger, MIZ-type containing 1), MIZ or RAI17, is a 1,067 amino acid protein that localizes to both the nucleus and the cytoplasm and contains one SP-RING-type zinc finger. Expressed in ovary, prostate, testis and spleen, Zimp10 interacts with AR (androgen receptor) and functions to increase the ligand-dependent transcriptional activity of AR and promote the sumoylation of AR, an event which is necessary for AR stimulation and overall activity. Multiple isoforms of Zimp10 exist due to alternative splicing events. The gene encoding Zimp10 maps to human chromosome 10, which houses over 1,200 genes and comprises nearly 4.5% of the human genome. Defects in some of the genes that map to chromosome 10 are associated with Charcot-Marie Tooth disease, Jackson-Weiss syndrome, Usher syndrome, nonsyndromic deafness, Wolman's syndrome, Cowden syndrome, multiple endocrine neoplasia type 2 and porphyria.

REFERENCES

- Nagase, T., et al. 1999. Prediction of the coding sequences of unidentified human genes. XV. The complete sequences of 100 new cDNA clones from brain which code for large proteins *in vitro*. DNA Res. 6: 337-345.
- Sharma, M., et al. 2003. hZimp10 is an androgen receptor co-activator and forms a complex with SUMO-1 at replication foci. EMBO J. 22: 6101-6114.
- Li, X., et al. 2006. The novel PIAS-like protein hZimp10 enhances Smad transcriptional activity. J. Biol. Chem. 281: 23748-23756.
- Lee, J., et al. 2007. The novel PIAS-like protein hZimp10 is a transcriptional co-activator of the p53 tumor suppressor. Nucleic Acids Res. 35: 4523-4534.

CHROMOSOMAL LOCATION

Genetic locus: ZMIZ1 (human) mapping to 10q22.3; Zmiz1 (mouse) mapping to 14 A3.

SOURCE

Zimp10 (G-12) is a mouse monoclonal antibody raised against amino acids 881-975 mapping near the C-terminus of Zimp10 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Zimp10 (G-12) is available conjugated to agarose (sc-376825 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376825 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-376825 PE), fluorescein (sc-376825 FITC), Alexa Fluor® 488 (sc-376825 AF488), Alexa Fluor® 546 (sc-376825 AF546), Alexa Fluor® 594 (sc-376825 AF594) or Alexa Fluor® 647 (sc-376825 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376825 AF680) or Alexa Fluor® 790 (sc-376825 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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RESEARCH USE

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

APPLICATIONS

Zimp10 (G-12) is recommended for detection of Zimp10 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).

Zimp10 (G-12) is also recommended for detection of Zimp10 in additional species, including porcine.

Suitable for use as control antibody for Zimp10 siRNA (h): sc-76960, Zimp10 siRNA (m): sc-76961, Zimp10 shRNA Plasmid (h): sc-76960-SH, Zimp10 shRNA Plasmid (m): sc-76961-SH, Zimp10 shRNA (h) Lentiviral Particles: sc-76960-V and Zimp10 shRNA (m) Lentiviral Particles: sc-76961-V.

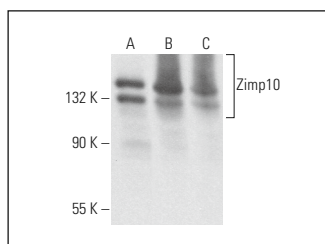
Molecular Weight of Zimp10: 130 kDa.

Positive Controls: Neuro-2A whole cell lysate: sc-364185, SK-N-SH cell lysate: sc-2410 or SK-N-MC cell lysate: sc-2237.

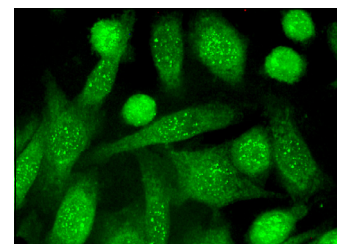
RECOMMENDED SUPPORT REAGENTS

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



Zimp10 (G-12): sc-376825. Western blot analysis of Zimp10 expression in SK-N-MC (A), SK-N-SH (B) and Neuro-2A (C) whole cell lysates.



Zimp10 (G-12): sc-376825. Immunofluorescence staining of formalin-fixed SW480 cells showing nuclear and cytoplasmic localization.

SELECT PRODUCT CITATIONS

- Lan, X., et al. 2017. Identification of two additional susceptibility loci for inflammatory bowel disease in a Chinese population. Cell. Physiol. Biochem. 41: 2077-2090.

STORAGE

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