

MIZIP (E-4): sc-398514

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. MIZIP (MCH-R1-interacting zinc finger protein), also known as ZMYND19 (zinc finger MYND domain-containing protein 19), is a 227 amino acid protein that localizes to both the cytoplasm and to the cell membrane and contains one MYND-type zinc finger. Expressed in stomach, brain, liver, testis, heart, kidney and skeletal muscle, MIZIP interacts with MCH-1R and is thought to regulate MCH-1R signaling. Human MIZIP shares 100% sequence identity with its mouse and rat counterparts, suggesting a conserved role between species. The gene encoding MIZIP maps to human chromosome 9, which houses over 900 genes and comprises nearly 4% of the human genome.

REFERENCES

1. Bächner, D., et al. 2002. MIZIP, a highly conserved, vertebrate specific melanin-concentrating hormone receptor 1 interacting zinc-finger protein. *FEBS Lett.* 526: 124-128.
2. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 611424. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
3. Humphray, S.J., et al. 2004. DNA sequence and analysis of human chromosome 9. *Nature* 429: 369-374.
4. Francke, F., et al. 2005. MYND domain specific interaction of the melanin-concentrating hormone receptor 1 interacting zinc-finger protein with α - and β -Tubulin. *Biochem. Biophys. Res. Commun.* 334: 1292-1298.

CHROMOSOMAL LOCATION

Genetic locus: ZMYND19 (human) mapping to 9q34.3; Zmynd19 (mouse) mapping to 2 A3.

SOURCE

MIZIP (E-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 209-227 at the C-terminus of MIZIP of human origin.

PRODUCT

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

MIZIP (E-4) is available conjugated to agarose (sc-398514 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-398514 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-398514 PE), fluorescein (sc-398514 FITC), Alexa Fluor® 488 (sc-398514 AF488), Alexa Fluor® 546 (sc-398514 AF546), Alexa Fluor® 594 (sc-398514 AF594) or Alexa Fluor® 647 (sc-398514 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-398514 AF680) or Alexa Fluor® 790 (sc-398514 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-398514 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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APPLICATIONS

MIZIP (E-4) is recommended for detection of MIZIP of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 MIZIP siRNA (h): sc-92879, MIZIP siRNA (m): sc-149453, MIZIP shRNA Plasmid (h): sc-92879-SH, MIZIP shRNA Plasmid (m): sc-149453-SH, MIZIP shRNA (h) Lentiviral Particles: sc-92879-V and MIZIP shRNA (m) Lentiviral Particles: sc-149453-V.

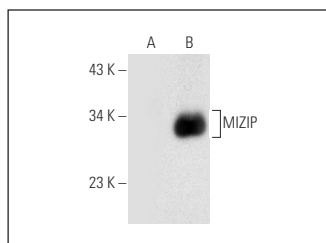
Molecular Weight of MIZIP: 26 kDa.

Positive Controls: MIZIP (m): 293T Lysate: sc-127156 or MIZIP (h): 293T Lysate: sc-170705.

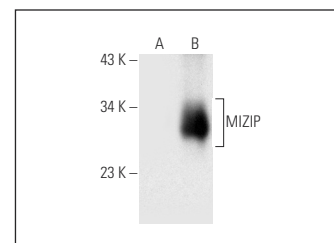
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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-IgG κ BP-FITC: sc-516140 or m-IgG κ 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



MIZIP (E-4): sc-398514. Western blot analysis of MIZIP expression in non-transfected: sc-117752 (A) and human MIZIP transfected: sc-170705 (B) 293T whole cell lysates.



MIZIP (E-4): sc-398514. Western blot analysis of MIZIP expression in non-transfected: sc-117752 (A) and mouse MIZIP transfected: sc-127156 (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.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.