

# MIZIP (N-18): sc-160529

## 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  $\alpha$ - and  $\beta$ -tubulin. *Biochem. Biophys. Res. Commun.* 334: 1292-1298.
5. Francke, F., et al. 2005. Immunohistochemical distribution of MIZIP and its co-expression with the melanin-concentrating hormone receptor 1 in the adult rodent brain. *Brain Res. Mol. Brain Res.* 139: 31-41.

## CHROMOSOMAL LOCATION

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

## SOURCE

MIZIP (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of MIZIP of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-160529 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## 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.

## APPLICATIONS

MIZIP (N-18) is recommended for detection of MIZIP of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

MIZIP (N-18) is also recommended for detection of MIZIP in additional species, including avian.

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.

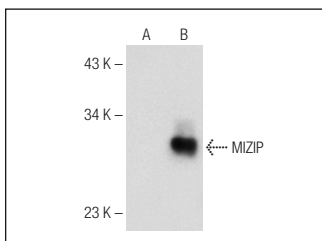
Molecular Weight of MIZIP: 26 kDa.

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

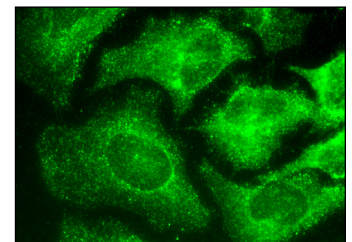
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



MIZIP (N-18): sc-160529. Western blot analysis of MIZIP expression in non-transfected: sc-117752 (A) and mouse MIZIP transfected: sc-127156 (B) 293T whole cell lysates.



MIZIP (N-18): sc-160529. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic and membrane localization.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.