



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

MIST1 (m2): 293T Lysate: sc-121666

BACKGROUND

MIST1 (muscle, intestine and stomach expression 1), also known as bHLHB8 (basic helix-loop-helix domain containing, class B, 8), is a 189 amino acid nuclear protein expressed in liver, brain, skeletal muscle and spleen. MIST1 contains a basic helix-loop-helix (bHLH) domain and belongs to the bHLH family of transcription factors. Members of this family bind to the E-box motifs present in the promoter or enhancer regions of a variety of developmentally regulated genes and function as either transcriptional activators or transcriptional repressors. MIST1 is capable of binding to E-box motifs as a homodimer or a heterodimer with E-proteins (E12 and E47) and is believed to play a role regulating the transcriptional activity of MyoD, a protein involved in the regulation of muscle cell development. More specifically, MIST1 functions as a repressor of MyoD activity, ensuring that myoblast populations do not differentiate. In addition, MIST1 is expressed in mammary epithelial cells and is essential for the regulation of mammary gland development.

REFERENCES

1. Lemercier, C., To, R.Q., Swanson, B.J., Lyons, G.E. and Konieczny, S.F. 1997. MIST1: a novel basic helix-loop-helix transcription factor exhibits a developmentally regulated expression pattern. *Dev. Biol.* 182: 101-113.
2. Yoshida, S., Ohbo, K., Takakura, A., Takebayashi, H., Okada, T., Abe, K. and Nabeshima, Y. 2001. Sgn1, a basic helix-loop-helix transcription factor delineates the salivary gland duct cell lineage in mice. *Dev. Biol.* 240: 517-530.
3. Pin, C.L., Rukstalis, J.M., Johnson, C. and Konieczny, S.F. 2001. The bHLH transcription factor MIST1 is required to maintain exocrine pancreas cell organization and acinar cell identity. *J. Cell Biol.* 155: 519-530.
4. McLellan, A.S., Langlands, K. and Kealey, T. 2002. Exhaustive identification of human class II basic helix-loop-helix proteins by virtual library screening. *Mech. Dev.* 119 Suppl. 1: S285-S291.
5. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 608606. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
6. Zhao, Y., Johansson, C., Tran, T., Bettencourt, R., Itahana, Y., Desprez, P.Y. and Konieczny, S.F. 2006. Identification of a basic helix-loop-helix transcription factor expressed in mammary gland alveolar cells and required for maintenance of the differentiated state. *Mol. Endocrinol.* 20: 2187-2198.
7. Guo, X., Cheng, L., Liu, Y., Fan, W. and Lu, D. 2007. Cloning, expression, and functional characterization of zebrafish MIST1. *Biochem. Biophys. Res. Commun.* 359: 20-26.
8. Tran, T., Jia, D., Sun, Y. and Konieczny, S.F. 2007. The bHLH domain of MIST1 is sufficient to activate gene transcription. *Gene Expr.* 13: 241-253.
9. Nozaki, K., Ogawa, M., Williams, J.A., Lafleur, B.J., Ng, V., Drapkin, R.I., Mills, J.C., Konieczny, S.F., Nomura, S. and Goldenring, J.R. 2008. A molecular signature of gastric metaplasia arising in response to acute parietal cell loss. *Gastroenterology* 134: 511-522.

CHROMOSOMAL LOCATION

Genetic locus: BhlhA15 (mouse) mapping to 5 G2.

PRODUCT

MIST1 (m2): 293T Lysate represents a lysate of mouse MIST1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

MIST1 (m2): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive MIST1 antibodies. Recommended use: 10-20 µl per lane.

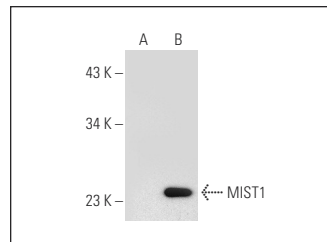
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

MIST1 (1H1): sc-80983 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse MIST1 expression in MIST1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

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.

DATA



MIST1 (1H1): sc-80983. Western blot analysis of MIST1 expression in non-transfected: sc-117752 (A) and mouse MIST1 transfected: sc-121666 (B) 293T whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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.