

Mimp (N-20): sc-79981

BACKGROUND

Mimp (met-induced mitochondrial protein), also known as MTCH2 (mitochondrial carrier homolog 2), is a 303 amino acid multi-pass mitochondrial membrane protein that contains 2 solcar repeats and functions to induce mitochondrial depolarization. The gene encoding Mimp maps to human chromosome 11. With approximately 135 million base pairs and 1,400 genes, chromosome 11 comprises approximately 4% of human genomic DNA and is considered a gene and disease association dense chromosome. The chromosome 11 encoded ATM gene is important for regulation of cell cycle arrest and apoptosis following double strand DNA breaks. ATM mutation leads to the disorder known as ataxia-telangiectasia. The blood disorders Sickle cell anemia and thalassemia are caused by HBB gene mutations, while Wilms' tumors, WAGR syndrome and Denys-Drash syndrome are associated with mutations of the WT1 gene. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are also associated with defects in chromosome 11-encoded genes.

REFERENCES

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2. Gross, A. 2005. Mitochondrial carrier homolog 2: a clue to cracking the BCL-2 family riddle? *J. Bioenerg. Biomembr.* 37: 113-119.
3. Grinberg, M., et al. 2005. Mitochondrial carrier homolog 2 is a target of tBID in cells signaled to die by tumor necrosis factor α . *Mol. Cell. Biol.* 25: 4579-4590.
4. Schwarz, M., et al. 2007. Mitochondrial carriers and pores: key regulators of the mitochondrial apoptotic program? *Apoptosis* 12: 869-876.
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CHROMOSOMAL LOCATION

Genetic locus: MTCH2 (human) mapping to 11p11.2; Mtch2 (mouse) mapping to 2 E1.

SOURCE

Mimp (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Mimp of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-79981 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Mimp (N-20) is recommended for detection of Mimp of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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).

Mimp (N-20) is also recommended for detection of Mimp in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Mimp siRNA (h): sc-75786, Mimp siRNA (m): sc-75787, Mimp shRNA Plasmid (h): sc-75786-SH, Mimp shRNA Plasmid (m): sc-75787-SH, Mimp shRNA (h) Lentiviral Particles: sc-75786-V and Mimp shRNA (m) Lentiviral Particles: sc-75787-V.

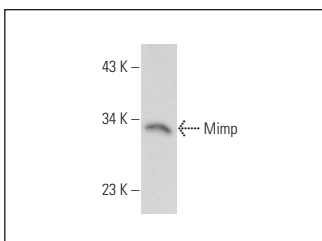
Molecular Weight of Mimp: 33 kDa.

Positive Controls: human breast extract: sc-363753.

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



Mimp (N-20): sc-79981. Western blot analysis of Mimp expression in human breast tissue extract.

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 or our catalog for detailed protocols and support products.