# SANTA CRUZ BIOTECHNOLOGY, INC.

# MATP (N-12): sc-48591



The membrane-associated transporter protein (MATP) is a 530 amino acid protein that spans the lipid bilayer 12 times. MATP is a melanocyte differentiation antigen that is expressed in a high percentage of melanoma cell lines. MATP is transcriptionally modulated by MITF, a melanocyte-specific transcription factor that may act indirectly or bind to a remote regulatory sequence. MATP may play a role in skin cancer, as its gene is expressed in a high percentage of melanoma cell lines, but not at significant levels in normal tissues. Mutations in the MATP gene have also been linked to albinism.

#### REFERENCES

BACKGROUND

- Baxter, L.L. and Pavan, W.J. 2002. The oculocutaneous albinism type IV gene MATP is a new marker of pigment cell precursors during mouse embryonic development. Mech. Dev. 116: 209-212.
- 2. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 606202. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Rundshagen, U., Zühlke, C., Opitz, S., Schwinger, E. and Käsmann-Kellner, B. 2004. Mutations in the MATP gene in five German patients affected by oculocutaneous albinism type 4. Hum. Mutat. 23: 106-110.
- 4. Yuasa, I., Umetsu, K., Watanabe, G., Nakamura, H., Endoh, M. and Irizawa, Y. 2004. MATP polymorphisms in Germans and Japanese: the L374F mutation as a population marker for Caucasoids. Int. J. Legal Med. 118: 364-366.
- 5. Graf, J., Hodgson, R. and van Daal, A. 2005. Single nucleotide polymorphisms in the MATP gene are associated with normal human pigmentation variation. Hum. Mutat. 25: 278-284.
- Blalock, J.E. 2005. The immune system as the sixth sense. J. Intern. Med. 257: 126-138.

#### CHROMOSOMAL LOCATION

Genetic locus: SLC45A2 (human) mapping to 5p13.2; Slc45a2 (mouse) mapping to 15 A1.

### SOURCE

MATP (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of MATP 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-48591 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

### APPLICATIONS

MATP (N-12) is recommended for detection of MATP 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).

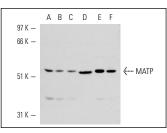
MATP (N-12) is also recommended for detection of MATP in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for MATP siRNA (h): sc-60986, MATP siRNA (m): sc-60987, MATP shRNA Plasmid (h): sc-60986-SH, MATP shRNA Plasmid (m): sc-60987-SH, MATP shRNA (h) Lentiviral Particles: sc-60986-V and MATP shRNA (m) Lentiviral Particles: sc-60987-V.

Molecular Weight of MATP: 58 kDa.

Positive Controls: SK-MEL-28 cell lysate: sc-2236, A-375 cell lysate: sc-3811 or B16-F0 cell lysate: sc-2298.

#### DATA



MATP (N-12): sc-48591. Western blot analysis of MATP expression in SK-MEL-28 (A), C32 (B), SK-MEL-24 (C), B16-F0 (D), Hs 294T (E) and A-375 (F) whole cell lysates

## **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.

### MONOS Satisfation Guaranteed

Try MATP (F-4): sc-377397 or MATP (7K-2): sc-100780, our highly recommended monoclonal alternatives to MATP (N-12).