

## 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 in



# melanotransferrin (m): 293T Lysate: sc-121600



The Boures to Overtion

#### **BACKGROUND**

Melanotransferrin is a member of the transferrin family of iron-binding proteins, which also includes serum transferrin, lactoferrin, and ovotransferrin, and it is highly expressed on melanoma cells. Melanotransferrin, also designated p97, shares a high degree of homology with transferrin, but does not play a significant role in the uptake of iron. Melanotransferrin utilizes a member of the low-density lipoprotein receptor family for transendothelial transport, which is not as efficient as the transport of transferrin through the corresponding transferrin receptor. The gene encoding human melanotransferrin maps to chromosome 3q28-29, and is predominantly expressed as either a membrane bound protein or a secreted form of the protein. Melanotransferrin is expressed in brain, where it may be involved in Alzheimer's disease. Melanotransferrin may also protect against membrane-lipid peroxidation, possess a metalloprotease activity, and possibly participate in intracellular adhesion. Further research will be necessary to fully elucidate the functions of this protein.

#### **REFERENCES**

- 1. Le Beau, M.M., et al. 1986. Chromosomal sublocalization of the human p97 melanoma antigen. Hum. Genet. 72: 294-6.
- Garratt, R.C., et al. 1992. A molecular model for the tumour-associated antigen, p97, suggests a Zn-binding function. FEBS Lett. 305: 55-61.
- 3. Rothenberger, S., et al. 1996. Coincident expression and distribution of melanotransferrin and transferrin receptor in human brain capillary endothelium. Brain Res. 712: 117-21.
- 4. Yamada, T., et al. 1999. Melanotransferrin is produced by senile plaqueassociated reactive microglia in Alzheimer's disease. Brain Res. 845: 1-5.
- Richardson, D.R. 2000. The role of the membrane-bound tumour antigen, melanotransferrin (p97), in iron uptake by the human malignant melanoma cell. Eur. J. Biochem. 267: 1290-1298.
- 6. Sekyere, E., et al. 2000. The membrane-bound transferrin homologue melanotransferrin: roles other than iron transport? FEBS Lett. 483: 11-16.
- Sala, R., et al. 2002. The human melanoma associated protein melanotransferrin promotes endothelial cell migration and angiogenesis in vivo. Eur. J. Cell Biol. 81: 599-607.
- 8. Demeule, M., et al. 2002. High transcytosis of melanotransferrin (P97) across the blood-brain barrier. J. Neurochem. 83: 924-933.
- 9. Food, M.R., et al. 2002. The soluble form of the membrane-bound transferrin homologue, melanotransferrin, inefficiently donates iron to cells via nonspecific internalization and degradation of the protein. Eur. J. Biochem. 269: 4435-4445.

#### CHROMOSOMAL LOCATION

Genetic locus: Mfi2 (mouse) mapping to 16 B2.

#### **PRODUCT**

melanotransferrin (m): 293T Lysate represents a lysate of mouse melanotransferrin transfected 293T cells and is provided as 100  $\mu g$  protein in 200  $\mu l$  SDS-PAGE buffer.

#### **APPLICATIONS**

melanotransferrin (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive melanotransferrin antibodies. Recommended use:  $10\text{-}20~\mu\text{l}$  per lane.

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

#### **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.

**Santa Cruz Biotechnology, Inc.** 1.800.457.3801 831.457.3800 fax 831.457.3801 **Europe** +00800 4573 8000 49 6221 4503 0 **www.scbt.com**