



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) 

transferrin (m3): 293T Lysate: sc-124253

BACKGROUND

Iron (Fe) is a tightly metabolically controlled mineral and growth factor present in all living cells. Iron not bound in erythrocyte hemoglobin is transported by transferrin (Tf), the iron transport protein of vertebrate serum. The transferrin protein contains two homologous domains, each of which contain an Fe-binding site. The majority of transferrin is synthesized in the liver and secreted into the blood, but it is also produced in lower amounts in testis and brain as well as in oligodendrocytes, where transferrin is an early marker of oligodendrocyte differentiation. From the blood, transferrin is internalized by erythroblasts and reticulocytes upon binding the transferrin receptor (TfR), also designated CD71, through a system of coated pits and vesicles. After Fe release, transferrin is returned to the extracellular medium, where it can be reused. Defects in the transferrin gene result in atransferrinemia, a rare autosomal recessive disorder characterized by microcytic anemia and iron loading.

REFERENCES

- MacGillivray, R.T., Mendez, E., Shewale, J.G., Sinha, S.K., Lineback-Zins, J. and Brew, K. 1983. The primary structure of human serum transferrin. The structures of seven cyanogen bromide fragments and the assembly of the complete structure. *J. Biol. Chem.* 258: 3543-3553.
- Yang, F., Lum, J.B., McGill, J.R., Moore, C.M., Naylor, S.L., van Bragt, P.H., Baldwin, W.D. and Bowman, B.H. 1984. Human transferrin: cDNA characterization and chromosomal localization. *Proc. Natl. Acad. Sci. USA* 81: 2752-2756.
- Morgan, E.H. and Baker, E. 1986. Iron uptake and metabolism by hepatocytes. *Fed. Proc.* 45: 2810-2816.
- Irie, S. and Tavassoli, M. 1987. Transferrin-mediated cellular iron uptake. *Am. J. Med. Sci.* 293: 103-111.
- Kohgo, Y., Kondo, H., Hirayama, M., Tsushima, N., Itoh, Y., Shintani, N., Fujikawa, K., Miyazaki, E. and Niitsu, Y. 1991. Expression and extracellular release of transferrin receptors on erythropoiesis. *Rinsho Ketsueki* 32: 580-586.
- Zakin, M.M. 1992. Regulation of transferrin gene expression. *FASEB J.* 6: 3253-3258.
- de Arriba Zepa, G.A., Saleh, M.C., Fernandez, P.M., Guillou, F., Espinosa de los Monteros, A., de Vellis, J., Zakin, M.M. and Baron, B. 2000. Alternative splicing prevents transferrin secretion during differentiation of a human oligodendrocyte cell line. *J. Neurosci. Res.* 61: 388-395.
- Beutler, E., Gelbart, T., Lee, P., Trevino, R., Fernandez, M.A. and Fairbanks, V.F. 2000. Molecular characterization of a case of atransferrinemia. *Blood* 96: 4071-4074.
- Richer, S., Rudy, D., Statkute, L., Karofy, K. and Frankowski, J. 2002. Serum iron, transferrin saturation, ferritin, and dietary data in age-related macular degeneration. *Am. J. Ther.* 9: 25-28.

CHROMOSOMAL LOCATION

Genetic locus: Trf (mouse) mapping to 9 F1.

PRODUCT

transferrin (m3): 293T Lysate represents a lysate of mouse transferrin transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

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

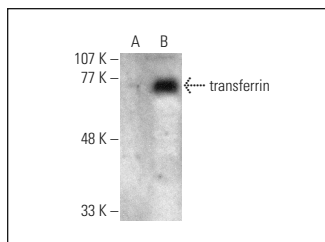
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

transferrin (F-8): sc-373785 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse transferrin expression in transferrin 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



transferrin (F-8) HRP: sc-373785 HRP. Direct western blot analysis of transferrin expression in non-transfected: sc-117752 (A) and mouse transferrin transfected: sc-124253 (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.