



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) 

transgelin-2 (m): 293T Lysate: sc-124255

BACKGROUND

Transgelin (also designated SM22 α), is expressed abundantly in smooth muscle cells. Transgelin-2 (also known as SM22 α homolog) is a homolog of transgelin and is also expressed in smooth muscle cells and by peritoneal B-1 cells. The human transgelin-2 gene (designated TAGLN2), which is located on chromosome 1q23.2, encodes a 199 amino acid protein that contains a calponin-like repeat and a calponin-homology (CH) domain. Transgelin-2 may function very similarly to transgelin. During embryogenesis, transgelin is expressed in smooth, cardiac and skeletal muscle, but is restricted during late fetal development and adulthood to all vascular and visceral smooth muscle cells and low levels of expression in heart. Transgelin is downregulated in several transformed cell lines, indicating that a reduction of transgelin expression may be an early indicator of the onset of transformation. Transgelin also binds Actin, causing Actin fibers to gel within minutes of binding. Binding of transgelin to Actin occurs at a ratio of 1:6 Actin monomers.

REFERENCES

1. Shapland, C., et al. 1993. Purification and properties of transgelin: a transformation and shape change sensitive Actin-gelling protein. *J. Cell Biol.* 121: 1065-1073.
2. Kobayashi, R., et al. 1994. Purification, characterization and partial sequence analysis of a new 25 kDa Actin-binding protein from bovine aorta: an SM22 homolog. *Biochem. Biophys. Res. Commun.* 198: 1275-1280.
3. Li, L., et al. 1997. Evidence for serum response factor-mediated regulatory networks governing SM22 α transcription in smooth, skeletal and cardiac muscle cells. *Dev. Biol.* 187: 311-321.
4. Lawson, D., et al. 1997. Fibroblast transgelin and smooth muscle SM22 α are the same protein, the expression of which is downregulated in many cell lines. *Cell Motil. Cytoskeleton* 38: 250-257.
5. Camoretti-Mercado, B., et al. 1998. Expression and cytogenetic localization of the human SM22 gene (TAGLN). *Genomics* 49: 452-457.
6. Stanier, P., et al. 1998. Paralogous sm22 α (Tagln) genes map to mouse chromosomes 1 and 9: further evidence for a paralogous relationship. *Genomics* 51: 144-147.
7. Kultima, K., et al. 2004. Valproic acid teratogenicity: a toxicogenomics approach. *Environ. Health Perspect.* 112: 1225-1235.
8. Shi, Y.Y., et al. 2005. Identification and analysis of tumour-associated antigens in hepatocellular carcinoma. *Br. J. Cancer* 92: 929-934.
9. Francés, R., et al. 2006. B-1 cells express transgelin-2: unexpected lymphocyte expression of a smooth muscle protein identified by proteomic analysis of peritoneal B-1 cells. *Mol. Immunol.* 43: 2124-2129.

CHROMOSOMAL LOCATION

Genetic locus: Tagln2 (mouse) mapping to 1 H3.

PRODUCT

transgelin-2 (m): 293T Lysate represents a lysate of mouse transgelin-2 transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

transgelin-2 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive transgelin-2 antibodies. Recommended use: 10-20 μ 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 $^{\circ}$ 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.