



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) 

Tryptase γ siRNA (m): sc-154708

BACKGROUND

Tryptases comprise a family of trypsin-like serine proteases that are enzymatically active as heparin-stabilized tetramers. There are four functional genes for tryptase: α I, β I, β II and γ I, which tend to cluster on chromosome 16p13.3. Tryptase γ , also known as TPSG1, PRSS31, serine protease 31 or TMT (transmembrane tryptase), is a 321 amino acid single-pass membrane protein. Belonging to the peptidase S1 family and Tryptase subfamily, Tryptase γ is composed of two alleles: γ -I and γ -II, and contains one peptidase S1 domain. Widely expressed, Tryptase γ is stored in secretory granules and is released upon mast cell activation.

REFERENCES

1. Wong, G.W., Tang, Y., Feyfant, E., Sali, A., Li, L., Li, Y., Huang, C., Friend, D.S., Krilis, S.A. and Stevens, R.L. 1999. Identification of a new member of the tryptase family of mouse and human mast cell proteases which possesses a novel COOH-terminal hydrophobic extension. *J. Biol. Chem.* 274: 30784-30793.
2. Caughey, G.H., Raymond, W.W., Blount, J.L., Hau, L.W., Pallaoro, M., Wolters, P.J. and Verghese, G.M. 2000. Characterization of human γ -tryptases, novel members of the chromosome 16p mast cell tryptase and prostatic gene families. *J. Immunol.* 164: 6566-6575.
3. Wong, G.W., Foster, P.S., Yasuda, S., Qi, J.C., Mahalingam, S., Mellor, E.A., Katsoulotos, G., Li, L., Boyce, J.A., Krilis, S.A. and Stevens, R.L. 2002. Biochemical and functional characterization of human transmembrane tryptase (TMT)/Tryptase γ . TMT is an exocytosed mast cell protease that induces airway hyperresponsiveness *in vivo* via an interleukin-13/interleukin-4 receptor α /signal transducer and activator of transcription (STAT) 6-dependent pathway. *J. Biol. Chem.* 277: 41906-41915.
4. Caughey, G.H. 2002. New developments in the genetics and activation of mast cell proteases. *Mol. Immunol.* 38: 1353-1357.
5. Xiang, M., Gu, Y., Zhao, F., Lu, H., Chen, S. and Yin, L. 2010. Mast cell tryptase promotes breast cancer migration and invasion. *Oncol. Rep.* 23: 615-619.

CHROMOSOMAL LOCATION

Genetic locus: Tpsg1 (mouse) mapping to 17 A3.3.

PRODUCT

Tryptase γ siRNA (m) is a target-specific 19-25 nt siRNA designed to knock down gene expression. Each vial contains 3.3 nmol of lyophilized siRNA, sufficient for a 10 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see Tryptase γ shRNA Plasmid (m): sc-154708-SH and Tryptase γ shRNA (m) Lentiviral Particles: sc-154708-V as alternate gene silencing products.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

STORAGE AND RESUSPENSION

Store lyophilized siRNA duplex at -20° C with desiccant. Stable for at least one year from the date of shipment. Once resuspended, store at -20° C, avoid contact with RNAses and repeated freeze thaw cycles.

Resuspend lyophilized siRNA duplex in 330 μ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330 μ l of RNase-free water makes a 10 μ M solution in a 10 μ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

Tryptase γ siRNA (m) is recommended for the inhibition of Tryptase γ expression in mouse cells.

SUPPORT REAGENTS

For optimal siRNA transfection efficiency, Santa Cruz Biotechnology's siRNA Transfection Reagent: sc-29528 (0.3 ml), siRNA Transfection Medium: sc-36868 (20 ml) and siRNA Dilution Buffer: sc-29527 (1.5 ml) are recommended. Control siRNAs or Fluorescein Conjugated Control siRNAs are available as 10 μ M in 66 μ l. Each contain a scrambled sequence that will not lead to the specific degradation of any known cellular mRNA. Fluorescein Conjugated Control siRNAs include: sc-36869, sc-44239, sc-44240 and sc-44241. Control siRNAs include: sc-37007, sc-44230, sc-44231, sc-44232, sc-44233, sc-44234, sc-44235, sc-44236, sc-44237 and sc-44238.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor Tryptase γ gene expression knockdown using RT-PCR Primer: Tryptase γ (m)-PR: sc-154708-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

RESEARCH USE

For research use only, not for use in diagnostic procedures.