



# 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](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

# TLE6 siRNA (m): sc-154292

## BACKGROUND

The Notch signaling pathway controls various cellular interactions that are important for the specification of a variety of fates in both vertebrates and invertebrates. Key players in the Notch pathway are the TLE genes (for transducin-like enhancer of split, also designated ESG for enhancer of split groucho), which are human homologs of the *Drosophila* groucho gene. TLE6 (transducin-like enhancer of split 6), also known as GRG6, is a 449 amino acid cytoplasmic protein belonging to the WD repeat groucho/TLE family. As a member of the subcortical maternal complex (SCMC), TLE6 is essential for zygotes to progress beyond the first embryonic cell divisions. TLE6 contains seven WD repeats, a motif known to mediate protein-protein interactions. The WD40 repeat family of proteins is suggested to be involved in signal transduction, RNA processing, gene regulation, vesicular trafficking, cytoskeletal assembly and may play a role in the control of cytotypic differentiation.

## REFERENCES

1. Wang, J.C., et al. 2000. Transducin-like enhancer of split proteins, the human homologs of *Drosophila* groucho, interact with hepatic nuclear factor 3 $\beta$ . *J. Biol. Chem.* 275: 18418-18423.
2. Tetsuka, T., et al. 2000. Inhibition of nuclear factor- $\kappa$ B-mediated transcription by association with the amino-terminal enhancer of split, a groucho-related protein lacking WD40 repeats. *J. Biol. Chem.* 275: 4383-4390.
3. Yochum, G.S. and Ayer, D.E. 2001. Pf1, a novel PHD zinc finger protein that links the TLE corepressor to the mSin3A-histone deacetylase complex. *Mol. Cell. Biol.* 21: 4110-4118.
4. Marçal, N., et al. 2005. Antagonistic effects of Grg6 and groucho/TLE on the transcription repression activity of brain factor 1/FoxG1 and cortical neuron differentiation. *Mol. Cell. Biol.* 25: 10916-10929.
5. Bajoghli, B. 2007. Evolution of the groucho/Tle gene family: gene organization and duplication events. *Dev. Genes Evol.* 217: 613-618.
6. Sekiya, T. and Zaret, K.S. 2007. Repression by groucho/TLE/Grg proteins: genomic site recruitment generates compacted chromatin *in vitro* and impairs activator binding *in vivo*. *Mol. Cell* 28: 291-303.
7. Jennings, B.H. and Ish-Horowicz, D. 2008. The groucho/TLE/Grg family of transcriptional co-repressors. *Genome Biol.* 9: 205.

## CHROMOSOMAL LOCATION

Genetic locus: Tle6 (mouse) mapping to 10 C1.

## PRODUCT

TLE6 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  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see TLE6 shRNA Plasmid (m): sc-154292-SH and TLE6 shRNA (m) Lentiviral Particles: sc-154292-V as alternate gene silencing products.

## RESEARCH USE

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

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

## APPLICATIONS

TLE6 siRNA (m) is recommended for the inhibition of TLE6 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  $\mu$ M in 66  $\mu$ 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.

## GENE EXPRESSION MONITORING

TLE6 (D-4): sc-515065 is recommended as a control antibody for monitoring of TLE6 gene expression knockdown by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) or immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use goat anti-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor TLE6 gene expression knockdown using RT-PCR Primer: TLE6 (m)-PR: sc-154292-PR (20  $\mu$ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.