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

SANTA CRUZ BIOTECHNOLOGY, INC.

LRRC15 siRNA (m): sc-149054

BACKGROUND

Leucine-rich repeats (LRRs) are 20-29 amino acid motifs that mediate protein-protein interactions. The primary function of these motifs is to provide a versatile structural framework for the formation of these protein-protein interactions. LRRs are present in a variety of proteins with diverse structure and function, including innate immunity and nervous system development. Several human diseases are associated with mutations in genes encoding LRR-containing proteins. The leucine-rich repeat-containing protein 15 (LRRC15, also designated LIB) is a 581 amino acid protein that contains 15 LRR repeats and is involved in cell-cell and/or -extracellular matrix interactions. LRRC15 is frequently overexpressed in multiple tumor types, most notably breast carcinoma. It is also associated with the pathogenesis of Alzheimer's disease.

REFERENCES

1. Kobe, B. and Kajava, A.V. 2001. The leucine-rich repeat as a protein recognition motif. Curr. Opin. Struct. Biol. 11: 725-732.
2. Satoh, K., Hata, M. and Yokota, H. 2002. A novel member of the leucine-rich repeat superfamily induced in rat astrocytes by β-amyloid. Biochem. Biophys. Res. Commun. 290: 756-762.
3. Satoh, K., Hata, M. and Yokota, H. 2004. High lib mRNA expression in breast carcinomas. DNA Res. 11: 199-203.
4. Satoh, K., Hata, M., Shimizu, T., Yokota, H., Akatsu, H., Yamamoto, T., Kosaka, K. and Yamada, T. 2005. Lib, transcriptionally induced in senile plaque-associated astrocytes, promotes glial migration through extracellular matrix. Biochem. Biophys. Res. Commun. 335: 631-636.
5. Matsushima, N., Tachi, N., Kuroki, Y., Enkhbayar, P., Osaki, M., Kamiya, M. and Kretsinger, R.H. 2005. Structural analysis of leucine-rich-repeat variants in proteins associated with human diseases. Cell. Mol. Life Sci. 62: 2771-2791.
6. Chen, Y., Aulia, S., Li, L. and Tang, B.L. 2006. AMIGO and friends: an emerging family of brain-enriched, neuronal growth modulating, type I transmembrane proteins with leucine-rich repeats (LRR) and cell adhesion molecule motifs. Brain Res Rev. 51: 265-274.
7. Dolan, J., Walshe, K., Alsbury, S., Hokamp, K., O'Keeffe, S., Okafuji, T., Miller, S.F., Tear, G. and Mitchell, K.J. 2007. The extracellular leucine-rich repeat superfamily; a comparative survey and analysis of evolutionary relationships and expression patterns. BMC Genomics 8: 320.
8. Ko, J. and Kim, E. 2007. Leucine-rich repeat proteins of synapses. J. Neurosci. Res. 85: 2824-2832.
9. O'Prey, J., Wilkinson, S. and Ryan, K.M. 2008. Tumor antigen LRRC15 impedes adenoviral infection: implications for virus-based cancer therapy. J. Virol. 82: 5933-5939.

CHROMOSOMAL LOCATION

Genetic locus: Lrrc15 (mouse) mapping to 16 B2.

PROTOCOLS

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

PRODUCT

LRRC15 siRNA (m) is a pool of 3 target-specific 19-25 nt siRNAs designed to knock down gene expression. Each vial contains 3.3 nmol of lyophilized siRNA, sufficient for a 10 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see LRRC15 shRNA Plasmid (m): sc-149054-SH and LRRC15 shRNA (m) Lentiviral Particles: sc-149054-V as alternate gene silencing products.

For independent verification of LRRC15 (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-149054A, sc-149054B and sc-149054C.

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 µl of the RNAse-free water provided. Resuspension of the siRNA duplex in 330 µl of RNAse-free water makes a 10 µM solution in a 10 µM Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

LRRC15 siRNA (m) is recommended for the inhibition of LRRC15 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 µM in 66 µl. 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 LRRC15 gene expression knockdown using RT-PCR Primer: LRRC15 (m)-PR: sc-149054-PR (20 µl). 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.