

# 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 in



# CASZ1 siRNA (m): sc-142024



The Power to Question

#### **BACKGROUND**

CASZ1 (castor zinc finger 1), also known as CST, SRG or ZNF693, is a 1,759 amino acid protein that localizes to the nucleus and contains 8  $\rm C_2H_2$ -type zinc fingers. Expressed in stomach, lung, testis, pancreas, heart, skeletal muscle and small intestine, CASZ1 exists as multiple alternatively spliced isoforms and is thought to function as a transcription factor. Human CASZ1 shares over 85% sequence homology with its mouse counterpart, suggesting a conserved role between species. The gene encoding CASZ1 maps to human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome. Chromosome 1 houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome. Aberrations in chromosome 1 are found in a variety of cancers, including head and neck cancer, malignant melanoma and multiple myeloma.

#### **REFERENCES**

- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 609895. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Yuan, Z.R., et al. 2005. Identification and characterization of survival-related gene, a novel cell survival gene controlling apoptosis and tumorigenesis. Cancer Res. 65: 10716-10724.
- 3. Liu, Z., et al. 2006. Molecular cloning and characterization of human Castor, a novel human gene upregulated during cell differentiation. Biochem. Biophys. Res. Commun. 344: 834-844.
- 4. Fernandez, F., et al. 2007. Association analysis of chromosome 1 migraine candidate genes. BMC Med. Genet. 8: 57.
- Carén, H., et al. 2007. Genetic and epigenetic changes in the common 1p36 deletion in neuroblastoma tumours. Br. J. Cancer 97: 1416-1424.

### **CHROMOSOMAL LOCATION**

Genetic locus: Casz1 (mouse) mapping to 4 E2.

## **PRODUCT**

CASZ1 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  $\mu\text{M}$  solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see CASZ1 shRNA Plasmid (m): sc-142024-SH and CASZ1 shRNA (m) Lentiviral Particles: sc-142024-V as alternate gene silencing products.

For independent verification of CASZ1 (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-142024A, sc-142024B and sc-142024C.

#### **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  $\mu$ 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**

CASZ1 siRNA (m) is recommended for the inhibition of CASZ1 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**

CASZ1 (B-11): sc-398303 is recommended as a control antibody for monitoring of CASZ1 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 reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use m-lgG $\kappa$  BP-FITC: sc-516140 or m-lgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850.

### **RT-PCR REAGENTS**

Semi-quantitative RT-PCR may be performed to monitor CASZ1 gene expression knockdown using RT-PCR Primer: CASZ1 (m)-PR: sc-142024-PR (20  $\mu$ 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.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 Fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com