SANTA CRUZ BIOTECHNOLOGY, INC.

Cml2 siRNA (m): sc-142413

BACKGROUND

Cml2 (camello-like 2) is a 238 amino acid multi-pass membrane protein belonging to the camello family. Members of the camello family share sequence similarities to the *Xenopus* protein camello, which is expressed in the suprablastoporal zone of gastrulating embryos. *Xenopus* camello is believed to play a role in gastrulation movements by modifying the cell surface and extracellular matrix proteins passing through the secretory pathway. Other members of the camello family include Cml1, Cml3, NAT-8, NAT-8L, NAT-8B and Cml5. Containing one N-acetyltransferase domain, Cml2 may participate in regulation of gastrulation. Cml2 is encoded by a gene located on mouse chromosome 6.

REFERENCES

1. Popsueva, A.E., et al. 2001. Overexpression of camello, a member of a novel protein family, reduces blastomere adhesion and inhibits gastrulation in *Xenopus laevis*. Dev. Biol. 234: 483-496.
2. Klein, S.L., et al. 2002. Genetic and genomic tools for *Xenopus* research: The NIH Xenopus initiative. Dev. Dyn. 225: 384-391.
3. Da Cruz, S., et al. 2003. Proteomic analysis of the mouse liver mitochondrial inner membrane. J. Biol. Chem. 278: 41566-41571.
4. Juhanson, P., et al. 2008. N-acetyltransferase 8, a positional candidate for blood pressure and renal regulation: resequencing, association and in silico study. BMC Med. Genet. 9: 25.
5. McMahon, A.P., et al. 2008. GUDMAP: the genitourinary developmental molecular anatomy project. J. Am. Soc. Nephrol. 19: 667-671.
6. Ariyannur, P.S., et al. 2010. Methamphetamine-induced neuronal protein NAT8L is the NAA biosynthetic enzyme: implications for specialized acetyl coenzyme A metabolism in the CNS. Brain Res. 1335: 1-13.
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CHROMOSOMAL LOCATION

Genetic locus: Cml2 (mouse) mapping to 6 C3.

PRODUCT

Cml2 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 Cml2 shRNA Plasmid (m): sc-142413-SH and Cml2 shRNA (m) Lentiviral Particles: sc-142413-V as alternate gene silencing products.

For independent verification of Cml2 (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-142413A, sc-142413B and sc-142413C.

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 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

Cml2 siRNA (m) is recommended for the inhibition of Cml2 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 Cml2 gene expression knockdown using RT-PCR Primer: Cml2 (m)-PR: sc-142413-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.