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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.

Acrosin siRNA (m): sc-45605

BACKGROUND

Acrosin, a member of the peptidase S1 family, is a major protease present in the acrosome of mature mammalian spermatozoa. Acrosin is a typical serine proteinase with trypsin-like cleavage specificity. The zymogen form, Proacrosin, is the precursor of Acrosin synthesized only in the postmeiotic stages of spermatogenesis. The active enzyme functions in the lysis of the zona pellucida, allowing the penetration of sperm through the innermost glycoprotein layers of the ovum.

REFERENCES

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4. Peknicova, J., et al. 2001. Monoclonal antibodies to intra-acrosomal proteins inhibit gamete binding *in vitro*. Theriogenology 56: 211-23.
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CHROMOSOMAL LOCATION

Genetic locus: Acr (mouse) mapping to 15 E3.

PRODUCT

Acrosin 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 Acrosin shRNA Plasmid (m): sc-45605-SH and Acrosin shRNA (m) Lentiviral Particles: sc-45605-V as alternate gene silencing products.

For independent verification of Acrosin (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-45605A, sc-45605B and sc-45605C.

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

Acrosin siRNA (m) is recommended for the inhibition of Acrosin 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 Acrosin gene expression knockdown using RT-PCR Primer: Acrosin (m)-PR: sc-45605-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.

PROTOCOLS

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