# SANTA CRUZ BIOTECHNOLOGY, INC.

# Mast Cell Protease 8 siRNA (m): sc-149285



# BACKGROUND

Santa Cruz Biotechnology now offers siRNA and shRNA (plasmid and lentiviral) gene silencers targeted to all (100%) known human and mouse genes. siRNAs are provided as pools of 3 target specific 19-25 nt siRNAs designed to knock down expression of specific gene of interest. Each vial contains 3.3 nmol of lyophilized siRNA and is sufficient for 50-100 transfections. For independent verification of gene silencing results, we also will provide, upon request, individual siRNA duplex components, each containing 3.3 nmol of lyophilized siRNA. shRNA Plasmid DNA Gene Silencers are provided as pools of three to five lentiviral vector plasmids each encoding target-specific 19-25 nt (plus hairpin) shRNA (sequences correspond to our well-established existing product line of siRNA gene silencers). shRNA Plasmids are provided as 20 µg transfection-ready plasmid DNA for either transient or stable (puromycin-selection) target specific gene silencing. shRNA Lentiviral Particles are provided as pools of three to five expression constructs each encoding target-specific 19-25 nt (plus hairpin loop) shRNA and are provided as 200 µl transduction-ready viral particles for gene silencing in mammalian cells (human or mouse). Suitable control antibodies and RT-PCR primers are available for monitoring gene expression knockdown.

# CHROMOSOMAL LOCATION

Genetic locus: Mcpt8 (mouse) mapping to 14 C3.

#### PRODUCT

Mast Cell Protease 8 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  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see Mast Cell Protease 8 shRNA Plasmid (m): sc-149285-SH and Mast Cell Protease 8 shRNA (m) Lentiviral Particles: sc-149285-V as alternate gene silencing products.

For independent verification of Mast Cell Protease 8 (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-149285A, sc-149285B and sc-149285C.

#### 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.

#### PROTOCOLS

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

## **APPLICATIONS**

Mast Cell Protease 8 siRNA (m) is recommended for the inhibition of Mast Cell Protease 8 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.

#### **RT-PCR REAGENTS**

Semi-quantitative RT-PCR may be performed to monitor Mast Cell Protease 8 gene expression knockdown using RT-PCR Primer: Mast Cell Protease 8 (m)-PR: sc-149285-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.