SANTA CRUZ BIOTECHNOLOGY, INC.

# H2-Q8 siRNA (m): sc-145870

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*The Power to Question*

## BACKGROUND

H2-Q8 (H-2 class I histocompatibility antigen, Q8 α chain), also known as MMS10-T, is a 326 amino acid single pass type I transmembrane protein belonging to the MHC class I family and containing one Ig-like C1-type domain. The Q genes, specifying Qa antigens and situated in the extended part of the major histocompatibility complex (MHC) of the mouse, are comprised of a subgroup of MHC class I genes, the function and importance of which has yet to be fully characterized. The extracellular domain of H2-Q8 plays a role in the immune system during the primary and secondary rejection of tumors where it is recognized by cross-reactive antitumor cytotoxic T cells, similar to H2-Q9. Also similar to H2-Q9, H2-Q8 is assembled via the transported associated with the antigen processing pathway. The gene encoding H2-Q8 is located on mouse chromosome 17 B1.

## REFERENCES


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3. Elliott, E., Karl, M. and Flaherty, L. 1987. Novel mRNA species from a Q-subregion class-I gene of the murine major histocompatibility complex. Gene 61: 189-198.
4. Matsuura, A., Schloss, R., Shen, F.W., Tung, J.S., Hunt, S.W., Fisher, D.A., Hood, L.E. and Boyse, E.A. 1989. Expression of the Q8/9d gene by T cells of the mouse. Immunogenetics 30: 156-161.
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6. Wu, L., Exley, G.E. and Warner, C.M. 1998. Differential expression of Ped gene candidates in preimplantation mouse embryos. Biol. Reprod. 59: 941-952.
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## CHROMOSOMAL LOCATION

Genetic locus: H2-Q8 (mouse) mapping to 17 B1.

## PRODUCT

H2-Q8 siRNA (m) is a target-specific 19-25 nt siRNA 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 H2-Q8 shRNA Plasmid (m): sc-145870-SH and H2-Q8 shRNA (m) Lentiviral Particles: sc-145870-V as alternate gene silencing products.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## 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

H2-Q8 siRNA (m) is recommended for the inhibition of H2-Q8 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 H2-Q8 gene expression knockdown using RT-PCR Primer: H2-Q8 (m)-PR: sc-145870-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

## PROTOCOLS

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