SANTA CRUZ BIOTECHNOLOGY, INC.

CTAGE5 siRNA (m): sc-142612

BACKGROUND

Cutaneous T cell lymphomas (CTCL) represent a group of malignancies that originate from CD4-T lymphocytes and manifest on the skin. CTCL is a general term for several neoplasms including mycosis fungoides, T cell leukemia/lymphoma and pagetoid reticulosis, all of which are very difficult to treat in the advanced stages. CTAGE5 (cutaneous T cell lymphoma-associated antigen 5), also known as MEA11, MEA6, MGEA11 or MGEA6, is an 804 amino acid tumor associated antigen that is found in tumors of various origins, including cutaneous T cell lymphomas. CTAGE5 is expressed as multiple isoforms due to alternative splicing events. Isoform 5A is expressed only in testis at the protein level while other isoforms are expressed in several other normal tissues, including brain, muscle and cranial skin.

REFERENCES

1. Eichmuller, S., et al. 2001. Serological detection of cutaneous T cell lymphoma-associated antigens. Proc. Natl. Acad. Sci. USA 98: 629-634.
2. Comtesse, N., et al. 2001. The MGEA6 multigene family has an active locus on 14q and at least nine pseudogenes on different chromosomes. Genomics 75: 43-48.
3. Comtesse, N., et al. 2002. MGEA6 is tumor-specific overexpressed and frequently recognized by patient-serum antibodies. Oncogene 21: 239-247.
4. Eichmüller, S. 2002. Towards defining specific antigens for cutaneous lymphomas. Onkologie 25: 448-454.
5. Eichmüller, S., et al. 2003. Tumor-specific antigens in cutaneous T cell lymphoma: expression and sero-reactivity. Int. J. Cancer 104: 482-487.
6. Usener, D., et al. 2003. cTAGE: a cutaneous T cell lymphoma associated antigen family with tumor-specific splicing. J. Invest. Dermatol. 121: 198-206.
7. Atanackovic, D., et al. 2006. Expression of cancer-testis antigens as possible targets for antigen-specific immunotherapy in head and neck squamous cell carcinoma. Cancer Biol. Ther. 5: 1218-1225.

CHROMOSOMAL LOCATION

Genetic locus: Ctage5 (mouse) mapping to 12 C1.

PRODUCT

CTAGE5 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 CTAGE5 shRNA Plasmid (m): sc-142612-SH and CTAGE5 shRNA (m) Lentiviral Particles: sc-142612-V as alternate gene silencing products.

For independent verification of CTAGE5 (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-142612A, sc-142612B and sc-142612C.

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

CTAGE5 siRNA (m) is recommended for the inhibition of CTAGE5 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 CTAGE5 gene expression knockdown using RT-PCR Primer: CTAGE5 (m)-PR: sc-142612-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.