SANTA CRUZ BIOTECHNOLOGY, INC.

CTAGE5 (G-23): sc-133488

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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.
8. Guinn, B.A., et al. 2006. The tumour antigens RAGE-1 and MGEA6 are expressed more frequently in the less lineage restricted subgroups of presentation acute myeloid leukaemia. Br. J. Haematol. 134: 238-239.
9. Costa, F.F., et al. 2007. Concise review: cancer/testis antigens, stem cells, and cancer. Stem Cells 25: 707-711.

CHROMOSOMAL LOCATION

Genetic locus: CTAGE5 (human) mapping to 14q21.1.

SOURCE

CTAGE5 (G-23) is an affinity purified rabbit polyclonal antibody raised against synthetic CTAGE5 peptide of human origin.

PRODUCT

Each vial contains 50 µg IgG in 0.5 ml of PBS with < 0.1% sodium azide, 0.1% gelatin and <0.02% sucrose.

APPLICATIONS

CTAGE5 (G-23) is recommended for detection of CTAGE5 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for CTAGE5 siRNA (h): sc-92131, CTAGE5 shRNA Plasmid (h): sc-92131-SH and CTAGE5 shRNA (h) Lentiviral Particles: sc-92131-V.

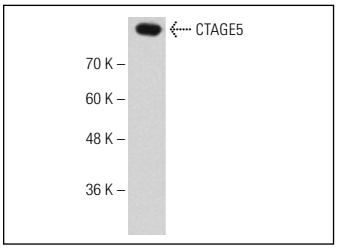
Molecular Weight of CTAGE5: 91 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



CTAGE5 (G-23): sc-133488. Western blot analysis of CTAGE5 expression in Hep G2 whole cell lysate.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

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