

CTAGE2/5 (F-5): sc-365331

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. CTAGE2 (cutaneous T cell lymphoma associated-antigen 2) is a member of the cancer/testis antigen family of proteins (CTAGE) that, under normal conditions, are found primarily in the testis with little or no expression in other parts of the body. Another member of the CTAG family, namely CTAGE5 (also known as MEA11, MEA6, MGEA11 or MGEA6), is a tumor associated antigen that is found in tumors of various origins, including cutaneous T cell lymphomas. Both CTAGE2 and CTAGE5 are expressed as multiple isoforms due to alternative splicing events.

REFERENCES

1. Eichmüller, 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: CTAGE1 (human) mapping to 18q11.2, CTAGE5 (human) mapping to 14q21.1.

SOURCE

CTAGE2/5 (F-5) is a mouse monoclonal antibody raised against amino acids 141-440 mapping within an internal region of CTAGE2 of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

CTAGE2/5 (F-5) is recommended for detection of CTAGE2 and CTAGE5 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of CTAGE2: 86 kDa.

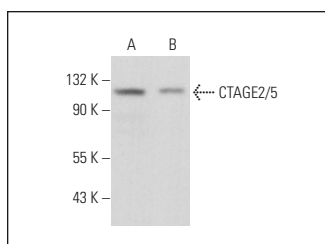
Molecular Weight of CTAGE5: 91 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, Jurkat whole cell lysate: sc-2204 or MIA PaCa-2 cell lysate: sc-2285.

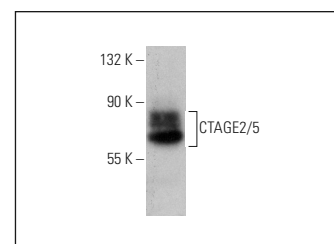
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



CTAGE2/5 (F-5): sc-365331. Western blot analysis of CTAGE2/5 expression in Jurkat (A) and MIA PaCa-2 (B) whole cell lysates.



CTAGE2/5 (F-5): sc-365331. Western blot analysis of CTAGE2/5 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.

PROTOCOLS

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