SANTA CRUZ BIOTECHNOLOGY, INC.

LAGE-1 (C-15): sc-50042

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Cancer-testis (CT) antigens are expressed in various cancers, and absent in normal adult tissues, thereby functioning as useful vaccine targets for immunotherapy. The LAGE-1 gene gives rise to 2 CT products: a 180 amino acid protein containing 2 glycine-rich regions and a hydrophobic stretch near the C-terminus, and an alternate 210 amino acid protein that lacks the hydrophobic stretch near the C terminus. Both proteins are expressed in melanoma cell lines, lung tumors, sarcomas, and other types of cancer cells, but but not in normal tissues except for testis and placenta. LAGE-1 activates type-1 melanoma-reactive $CD4^+$ helper-T cells and, thus, promotes long-lasting antitumor responses.

REFERENCES

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4. Vaughan, H.A., et al. 2004. Immunohistochemical and molecular analysis of human melanomas for expression of the human cancer-testis antigens NY-ESO-1 and LAGE-1. Clin. Cancer Res. 10: 8396-8404.
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CHROMOSOMAL LOCATION

Genetic locus: CTAG2 (human) mapping to Xq28.

SOURCE

LAGE-1 (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of LAGE-1 of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-50042 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

LAGE-1 (C-15) is recommended for detection of LAGE-1B of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Suitable for use as control antibody for LAGE-1 siRNA (h): sc-60916, LAGE-1 shRNA Plasmid (h): sc-60916-SH and LAGE-1 shRNA (h) Lentiviral Particles: sc-60916-V.

Molecular Weight of LAGE-1: 21 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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 or our catalog for detailed protocols and support products.