

LAGE-1 (3H1): sc-517172

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 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 (3H1) is a mouse monoclonal antibody raised against amino acids 111-210 representing partial length LAGE-1 of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 100 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

LAGE-1 (3H1) is recommended for detection of LAGE-1 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).

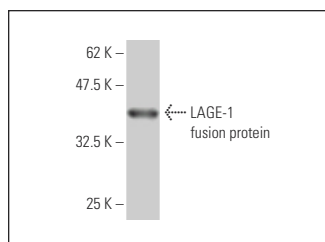
Suitable for use as control antibody for LAGE-1 siRNA (h): sc-60916, LAGE-1 shRNA Plasmid (h): sc-60916-SH and LAGE-1 shRNA (h) Lentiviral Particles: sc-60916-V.

Molecular Weight of LAGE-1: 21 kDa.

RECOMMENDED 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, 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



LAGE-1 (3H1): sc-517172. Western blot analysis of human recombinant LAGE-1 fusion protein.

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.