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 two CT products: a 180 amino acid, 18.2 kDa protein containing two glycine-rich regions and a hydrophobic stretch near the C-terminus, and an alternate 210 amino acid, 21.1 kDa 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

CHROMOSOMAL LOCATION
Genetic locus: CTAG2 (human) mapping to Xq28.

SOURCE
LAGE-1 (H-80) is a rabbit polyclonal antibody raised against amino acids 131-210 mapping at 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.

APPLICATIONS
LAGE-1 (H-80) 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)), 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); non cross-reactive with LAGE-1A.

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 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 Luminal Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2021 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2022 (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.