

NY-ESO-1 (H-180): sc-28244

BACKGROUND

NY-ESO-1 (also known as autoimmunogenic cancer/testis antigen) is a tumor-specific shared antigen with distinctive immunogenicity. NY-ESO-1 is a member of the cancer/testis (CT) family of human tumor-associated antigens. NY-ESO-1 is an attractive candidate tumor antigen for the development of immunotherapy for a wide variety of cancers. NY-ESO-1 is expressed in multiple types of tumors, but its normal tissue distribution is primarily limited to the testis and ovaries. In addition, NY-ESO-1 elicits frequent antibody responses in cancer patients that are accompanied by strong CD8⁺ T cell responses against HLA-A2-restricted epitopes. Therefore, both humoral and cellular immune responses can be mounted against NY-ESO-1. LAGE-1, also known as ESO-2, is observed in 25-50% of tumor samples of melanomas, non-small-cell lung carcinomas, bladder, prostate and head and neck cancers.

REFERENCES

1. Stockert, E., et al. 1998. A survey of the humoral immune response of cancer patients to a panel of human tumor antigens. *J. Exp. Med.* 187: 1349-1354.
2. Schultz-Thater, E., et al. 2000. NY-ESO-1 tumor-associated antigen is a cytoplasmic protein detectable by specific monoclonal antibodies in cell lines and clinical specimens. *Br. J. Cancer* 83: 204-208.
3. Gnjatic, S., et al. 2000. Strategy for monitoring T cell responses to NY-ESO-1 in patients with any HLA class I allele. *Proc. Natl. Acad. Sci. USA* 97: 10917-10922.
4. Zeng, G., et al. 2001. CD4⁺ T cell recognition of MHC class II-restricted epitopes from NY-ESO-1 presented by a prevalent HLA DP4 allele: association with NY-ESO-1 antibody production. *Proc. Natl. Acad. Sci. USA* 98: 3964-3969.
5. Chen, C.H., et al. 2001. Expressions of cancer-testis antigens in human hepatocellular carcinomas. *Cancer Lett.* 164: 189-195.
6. Jager, D., et al. 2001. Vaccination for malignant melanoma: recent developments. *Oncology* 60: 1-7.
7. Bownds, S., et al. 2001. Induction of tumor-reactive cytotoxic T lymphocytes using a peptide from NY-ESO-1 modified at the carboxy-terminus to enhance HLA-A2.1 binding affinity and stability in solution. *J. Immunother.* 24: 1-9.

SOURCE

NY-ESO-1 (H-180) is a rabbit polyclonal antibody raised against amino acids 71-180 mapping at the C-terminus of NY-ESO-1 of human origin.

PRODUCT

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

STORAGE

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

APPLICATIONS

NY-ESO-1 (H-180) is recommended for detection of NY-ESO-1, LAGE-1 and LAGE-2A 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).

Molecular Weight of NY-ESO-1: 22 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 Luminol 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-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.



Try **NY-ESO-1 (E978): sc-53869** or **NY-ESO-1 (6A146): sc-71734**, our highly recommended monoclonal alternatives to NY-ESO-1 (H-180). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **NY-ESO-1 (E978): sc-53869**.