

NY-ESO-1 (6A146): sc-71734

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 testis and ovary. 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.

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.

CHROMOSOMAL LOCATION

Genetic locus: CTAG1B (human) mapping to Xq28.

SOURCE

NY-ESO-1 (6A146) is a mouse monoclonal antibody raised against recombinant NY-ESO-1 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain 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 (6A146) is recommended for detection of NY-ESO-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 immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for NY-ESO-1 siRNA (h): sc-37321, NY-ESO-1 shRNA Plasmid (h): sc-37321-SH and NY-ESO-1 shRNA (h) Lentiviral Particles: sc-37321-V.

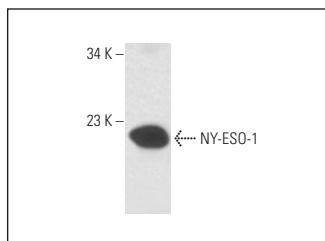
Molecular Weight of NY-ESO-1: 22 kDa.

Positive Controls: U266 nuclear extract or human testis extract: sc-363781.

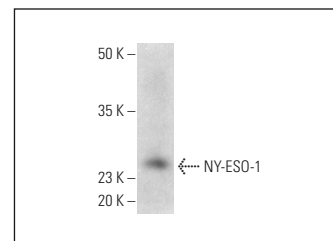
RECOMMENDED SUPPORT REAGENTS

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



NY-ESO-1 (6A146): sc-71734. Western blot analysis of NY-ESO-1 expression in U266 nuclear extract.



NY-ESO-1 (6A146): sc-71734. Western blot analysis of NY-ESO-1 expression in human testis tissue extract.

RESEARCH USE

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

PROTOCOLS

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



See **NY-ESO-1 (E978): sc-53869** for NY-ESO-1 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.