

NY-ESO-1 (E978): sc-53869

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.

CHROMOSOMAL LOCATION

Genetic locus: CTAG1B (human) mapping to Xq28.

SOURCE

NY-ESO-1 (E978) 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.

NY-ESO-1 (E978) is available conjugated to agarose (sc-53869 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-53869 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-53869 PE), fluorescein (sc-53869 FITC), Alexa Fluor® 488 (sc-53869 AF488), Alexa Fluor® 546 (sc-53869 AF546), Alexa Fluor® 594 (sc-53869 AF594) or Alexa Fluor® 647 (sc-53869 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-53869 AF680) or Alexa Fluor® 790 (sc-53869 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

NY-ESO-1 (E978) 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (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 U266 whole cell lysate: sc-364800.

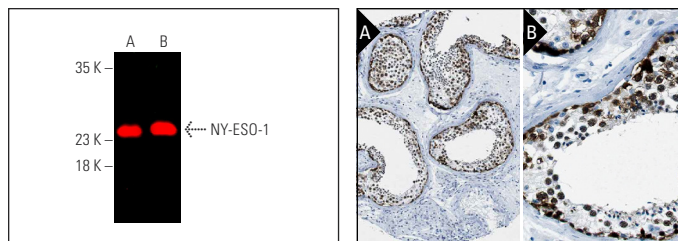
STORAGE

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

RESEARCH USE

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

DATA



NY-ESO-1 (E978): sc-53869. Near-infrared western blot analysis of NY-ESO-1 expression in U266 nuclear extract (A) and U266 whole cell lysate (B). Blocked with UltraCruz® Blocking Reagent: sc-516214. Detection reagent used: m-IgGx BP-CFL 790: sc-516181.

NY-ESO-1 (E978): sc-53869. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing nuclear and cytoplasmic staining of cells in seminiferous ducts at low (A) and high (B) magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.

SELECT PRODUCT CITATIONS

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- Sideras, K., et al. 2015. Tumour antigen expression in hepatocellular carcinoma in a low-endemic western area. *Br. J. Cancer* 112: 1911-1920.
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- Bæk, R., et al. 2016. Does smoking, age or gender affect the protein phenotype of extracellular vesicles in plasma? *Transfus. Apher. Sci.* 55: 44-52.
- Golnik, R., et al. 2016. Major histocompatibility complex (MHC) class I processing of the NY-ESO-1 antigen is regulated by Rpn10 and Rpn13 proteins and immunoproteasomes following non-lysine ubiquitination. *J. Biol. Chem.* 291: 8805-8815.

PROTOCOLS

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