

MAGE-C1 (CT7-33): sc-53868

BACKGROUND

The melanoma-associated antigen (MAGE) family consists of a number of antigens recognized by cytotoxic T lymphocytes. The MAGE genes were initially isolated from different kinds of tumors. Based on their virtually exclusive tumor-specific expression in adult tissues, they have been used as targets for cancer immunotherapy. MAGE genes encode for tumor-rejection antigens and are expressed in tumors of different histologic types, but not in normal tissues, with the exception of testis and placenta. Although a large number of MAGE genes have now been identified and extensively studied in tumors of various origin, their function in normal cells remains unknown. Also referred to as CT7, MAGE-C1 is a member of the MAGE family that is expressed in multiple myeloma and that correlates with plasma-cell proliferation.

CHROMOSOMAL LOCATION

Genetic locus: MAGEC1 (human) mapping to Xq27.2.

SOURCE

MAGE-C1 (CT7-33) is a mouse monoclonal antibody raised against amino acids 552-901 representing truncated recombinant MAGE-C1 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.

MAGE-C1 (CT7-33) is available conjugated to agarose (sc-53868 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-53868 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-53868 PE), fluorescein (sc-53868 FITC), Alexa Fluor® 488 (sc-53868 AF488), Alexa Fluor® 546 (sc-53868 AF546), Alexa Fluor® 594 (sc-53868 AF594) or Alexa Fluor® 647 (sc-53868 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-53868 AF680) or Alexa Fluor® 790 (sc-53868 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

MAGE-C1 (CT7-33) is recommended for detection of MAGE-C1 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 MAGE-C1 siRNA (h): sc-62579, MAGE-C1 shRNA Plasmid (h): sc-62579-SH and MAGE-C1 shRNA (h) Lentiviral Particles: sc-62579-V.

Molecular Weight of MAGE-C1: 124 kDa.

Positive Controls: SK-MEL-28 cell lysate: sc-2236, U-87 MG cell lysate: sc-2411 or JEG-3 whole cell lysate: sc-364255.

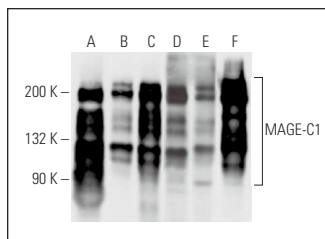
STORAGE

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

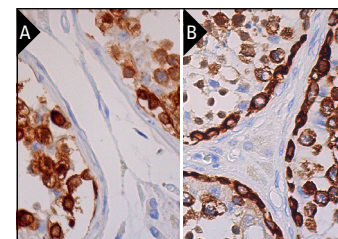
RESEARCH USE

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

DATA



MAGE-C1 (CT7-33): sc-53868. Western blot analysis of MAGE-C1 expression in human testis tissue extract (A) and Hs 294T (B), SK-MEL-28 (C), U-87 MG (D) and JEG-3 (E) whole cell lysates and U266 nuclear extract (F).



MAGE-C1 (CT7-33): sc-53868. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing nuclear and cytoplasmic staining of cells in seminiferous ducts (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing cytoplasmic or cytoplasmic and nuclear staining of cells in seminiferous ducts (B).

SELECT PRODUCT CITATIONS

- Xia, Q.Y., et al. 2013. Sperm protein 17, MAGE-C1 and NY-ESO-1 in hepatocellular carcinoma: expression frequency and their correlation with clinical parameters. *Int. J. Clin. Exp. Pathol.* 6: 1610-1616.
- Piotti, K.C., et al. 2013. Expression of cancer/testis (CT) antigens in squamous cell carcinoma of the head and neck: evaluation as markers of squamous dysplasia. *Pathol. Res. Pract.* 209: 721-726.
- Sideras, K., et al. 2015. Tumour antigen expression in hepatocellular carcinoma in a low-endemic western area. *Br. J. Cancer* 112: 1911-1920.
- Beppu, S., et al. 2017. Expression of cancer/testis antigens in salivary gland carcinomas with reference to MAGE-A and NY-ESO-1 expression in adenoid cystic carcinoma. *Histopathology* 71: 305-315.
- Sakane, T., et al. 2021. Expression of cancer testis antigens in thymic epithelial tumors. *Pathol. Int.* 71: 471-479.
- Papanikolaou, N.A., et al. 2022. Systems-level mapping of cancer testis antigen 1b/a to sarcoma pathways identifies activated ran binding-2 E3 SUMO-protein ligase and transducin-like enhancer protein 1. *Front. Genet.* 13: 834445.

PROTOCOLS

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

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