

# MAGE-B1 (B-4): sc-271008

## 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 and, 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.

## REFERENCES

- Okami, J., et al. 2000. Genetic detection for micrometastasis in lymph node of biliary tract carcinoma. *Clin. Cancer Res.* 6: 2326-2332.
- Granelli, P., et al. 2000. Melanoma antigen genes 1 and 2 are differentially expressed in human gastric and cardiac carcinomas. *Scand. J. Gastroenterol.* 35: 528-533.
- Klein, C., et al. 2000. Comparative analysis of genetically modified dendritic cells and tumor cells as therapeutic cancer vaccines. *J. Exp. Med.* 191: 1699-1708.
- Busam, K.J., et al. 2000. Immunoreactivity with the anti-MAGE antibody 57B in malignant melanoma: frequency of expression and correlation with prognostic parameters. *Mod. Pathol.* 13: 459-465.

## CHROMOSOMAL LOCATION

Genetic locus: MAGEB1 (human) mapping to Xp21.2; Mageb1 (mouse) mapping to X C2.

## SOURCE

MAGE-B1 (B-4) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 210-235 within an internal region of MAGE-B1 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

MAGE-B1 (B-4) is available conjugated to agarose (sc-271008 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-271008 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-271008 PE), fluorescein (sc-271008 FITC), Alexa Fluor® 488 (sc-271008 AF488), Alexa Fluor® 546 (sc-271008 AF546), Alexa Fluor® 594 (sc-271008 AF594) or Alexa Fluor® 647 (sc-271008 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-271008 AF680) or Alexa Fluor® 790 (sc-271008 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-271008 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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## APPLICATIONS

MAGE-B1 (B-4) is recommended for detection of MAGE-B1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for MAGE-B1 siRNA (h): sc-37314, MAGE-B1 siRNA (m): sc-149217, MAGE-B1 shRNA Plasmid (h): sc-37314-SH, MAGE-B1 shRNA Plasmid (m): sc-149217-SH, MAGE-B1 shRNA (h) Lentiviral Particles: sc-37314-V and MAGE-B1 shRNA (m) Lentiviral Particles: sc-149217-V.

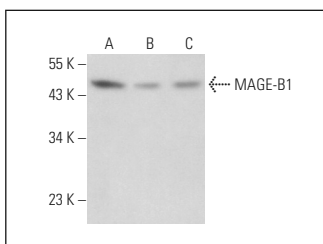
Molecular Weight of MAGE-B1: 43 kDa.

Positive Controls: MAGE-B1 (h): 293T Lysate: sc-113270, K-562 whole cell lysate: sc-2203 or 3T3-L1 cell lysate: sc-2243.

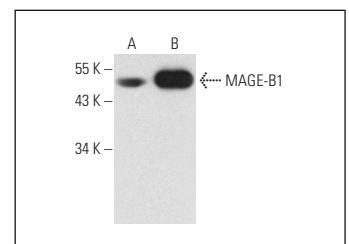
## RECOMMENDED SUPPORT REAGENTS

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



MAGE-B1 (B-4): sc-271008. Western blot analysis of MAGE-B1 expression in K-562 (A), RAW 264.7 (B) and 3T3-L1 (C) whole cell lysates.



MAGE-B1 (B-4): sc-271008. Western blot analysis of MAGE-B1 expression in non-transfected: sc-117752 (A) and human MAGE-B1 transfected: sc-113270 (B) 293T whole cell lysates.

## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.