



MAGE-C2/C3 (H-57): sc-68852

BACKGROUND

MAGE-C2/C3 (melanoma-associated antigen C2, hepatocellular carcinoma-associated antigen 587) is a 373 amino acid protein encoded by the human gene MAGEC2. Genes of the MAGE family direct the expression of tumor antigens that are recognized on human melanomas by autologous cytolytic T lymphocytes. Among tumor tissues, MAGE-C2/C3 is frequently expressed in seminomas, melanomas and bladder transitional cell carcinomas. It is also expressed in a significant fraction of head and neck carcinomas, breast carcinomas, nonsmall-cell lung carcinomas and sarcomas. In hepatocellular carcinoma, there is an inverse correlation between tumor differentiation and protein expression, i.e. the lower the differentiation, the higher percentage of expression. MAGE-C2/C3 is not expressed in normal tissues, except in germ cells in the seminiferous tubules and in Purkinje cells of the cerebellum. It is strongly expressed in spermatogonia and primary spermatocytes; however, at later stages of maturation, expression gradually decreases to become undetectable in mature spermatids.

REFERENCES

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4. Zhuang, R., et al. 2006. Generation of monoclonal antibodies to cancer/testis (CT) antigen CT10/MAGE-C2. *Cancer Immun.* 6: 7-7.
5. Atanackovic, D., et al. 2006. Expression of cancer-testis antigens as possible targets for antigen-specific immunotherapy in head and neck squamous cell carcinoma. *Cancer Biol. Ther.* 5: 1218-1225.
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7. Godelaine, D., et al. 2007. A new tumor-specific antigen encoded by MAGE-C2 and presented to cytolytic T lymphocytes by HLA-B44. *Cancer Immunol. Immunother.* 56: 753-759.
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CHROMOSOMAL LOCATION

Genetic locus: MAGEC2 (human) mapping to Xq27, MAGEC3 (human) mapping to Xq27.2.

SOURCE

MAGE-C2/C3 (H-57) is a rabbit polyclonal antibody raised against amino acids 1-57 mapping at the C-terminus of MAGE-C2 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.

APPLICATIONS

MAGE-C2/C3 (H-57) is recommended for detection of melanoma-associated antigen C2 and melanoma-associated antigen C3 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 MAGE-C2/C3: 42 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.

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 or our catalog for detailed protocols and support products.