SANTA CRUZ BIOTECHNOLOGY, INC.

BAGE3/2 (D-16): sc-83512

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Members of the BAGE gene family encode antigens that are recognized by cytotoxic T lymphocytes and are also known as CT (cancer/testis) antigens. Generated by juxtacentromeric shuffling of the MLL3 gene, the ancestral BAGE gene was expanded by acrocentric exchanges and/or juxtacentromeric movements. Generally, BAGE proteins are silent in all normal tissues with the exception of testis. BAGE2 and BAGE 3 (B melanoma antigen 2 and 3, respectively), also known as cancer/testis antigen 2.2 and 2.3 (respectively), are 109 amino acid secreted proteins that are expressed in 22% of melanomas, lung and bladder carcinomas and are also expressed in normal testis tissue. Like the genes encoding MAGE proteins, BAGE genes are most likely silenced by DNA methylation and/or chromatin compaction in normal tissues other than testis.

REFERENCES

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7. Grunau, C., Brun, M.E., Rivals, I., Selves, J., Hindermann, W., Favre-Mercuret, M., Granier, G. and De Sario, A. 2008. BAGE hypomethylation, a new epigenetic biomarker for colon cancer detection. Cancer Epidemiol. Biomarkers Prev. 17: 1374-1379.

CHROMOSOMAL LOCATION

Genetic locus: BAGE3 (human) mapping to 21p11.1, BAGE2 (human) mapping to 21p11.1.

STORAGE

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

SOURCE

BAGE3/2 (D-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of BAGE3 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-83512 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

BAGE3/2 (D-16) is recommended for detection of BAGE3 and BAGE2 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); non cross-reactive with other BAGE family members.

Molecular Weight of BAGE3/2: 12 kDa.

Positive Controls: A549 cell lysate: sc-2413 or SK-MEL-28 cell lysate: sc-2236.

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.

RESEARCH USE

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