XAGE-1 (T-13): sc-50196

BACKGROUND

XAGE-1 is a cancer testis antigen with an expression pattern that is limited to germ cells of the testis and a variety of neoplastic tissues, but is abundantly expressed in breast, prostate and lung cancer, as well as in Ewing's sarcomas and rhabdomyosarcomas. The XAGE-1 gene lies on the X chromosome and encodes for a 146 amino acid protein. XAGE-1 expression in normal and cancerous tissues is regulated by methylation of the CpG island in the gene promoter. Four transcript variants of XAGE-1 (XAGE-1a-d) exist, and XAGE-1b and XAGE-1d are specifically overexpressed in lung cancer. Because XAGE-1 is present in such a diverse range of cancers, it may be useful as a target for many cancer immunotherapies.

REFERENCES

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3. Zendman, A.J., et al. 2002. Characterization of XAGE-1b, a short major transcript of cancer/testis-associated gene XAGE-1, induced in melanoma metastasis. Int. J. Cancer 97: 195-204.

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5. Egland, K.A., et al. 2002. Characterization of overlapping XAGE-1 transcripts encoding a cancer testis antigen expressed in lung, breast, and other types of cancers. Mol. Cancer Ther. 1: 441-450.

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8. Lim, J.H., et al. 2005. Activation of human cancer/testis antigen gene, XAGE-1, in tumor cells is correlated with CpG island hypomethylation. Int. J. Cancer. 116: 200-206.

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CHROMOSOMAL LOCATION

Genetic locus: XAGE1 (human) mapping to Xp11.22-p11.21.

SOURCE

XAGE-1 (T-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of XAGE-1 of human origin.

STORAGE

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

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-50196 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

XAGE-1 (T-13) is recommended for detection of all isoforms of XAGE-1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 XAGE-1 siRNA (h): sc-61806.

Molecular Weight of XAGE-1: 16 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.