

XAGE-1 (H-92): sc-134820

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

1. Liu, X.F., et al. 2000. XAGE-1, a new gene that is frequently expressed in Ewing's sarcoma. *Cancer Res.* 60: 4752-4755.
2. Wang, T., et al. 2001. L552S, an alternatively spliced isoform of XAGE-1, is overexpressed in lung adenocarcinoma. *Oncogene* 20: 7699-7709.
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.
4. Zendman, A.J., et al. 2002. The XAGE family of cancer/testis-associated genes: alignment and expression profile in normal tissues, melanoma lesions and Ewing's sarcoma. *Int. J. Cancer* 99: 361-369.
5. Eglund, 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.
6. Online Mendelian Inheritance in Man, OMIM[™]. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 300289. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

SOURCE

XAGE-1 (H-92) is a rabbit polyclonal antibody raised against amino acids 1-92 mapping at the N-terminus of XAGE-1 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.

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.

APPLICATIONS

XAGE-1 (H-92) 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), 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 XAGE-1 siRNA (h): sc-61806, XAGE-1 shRNA Plasmid (h): sc-61806-SH and XAGE-1 shRNA (h) Lentiviral Particles: sc-61806-V.

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 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.