## SANTA CRUZ BIOTECHNOLOGY, INC.

# XAGE2B (E-16): sc-244667



#### BACKGROUND

XAGE2B (X antigen family, member 2B), also known as XAGE2, GAGED3 or cancer/testis antigen 12.2, is a 111 amino acid protein that belongs to the GAGE family. Like other family members, XAGE2B may play a role in inhibition of cancer cell growth. The gene encoding XAGE2B maps to human chromosome X, which consists of about 153 million base pairs and nearly 1,000 genes. The combination of an X and Y chromosome leads to normal male development while two copies of X lead to normal female development. There are a number of conditions related to an unusual number and combination of sex chromosomes being inherited, including Turner's syndrome, Klinefelter's syndrome and Triple X syndrome. Color blindness, hemophilia, and Duchenne muscular dystrophy are well known X chromosome-linked conditions which affect males more frequently as males carry a single X chromosome.

## REFERENCES

- 1. Risco, J., Pardo, C., Figuera, E., Pellicer, F. and Año, T. 1992. Jugular phlebectasia. Apropos a case. Acta Otorrinolaringol. Esp. 43: 67-69.
- 2. Brinkmann, U., Vasmatzis, G., Lee, B. and Pastan, I. 1999. Novel genes in the PAGE and GAGE family of tumor antigens found by homology walking in the dbEST database. Cancer Res. 59: 1445-1448.
- 3. Gianfrancesco, F., Sanges, R., Esposito, T., Tempesta, S., Rao, E., Rappold, G., Archidiacono, N., Graves, J.A., Forabosco, A. and D'Urso, M. 2001. Differential divergence of three human pseudoautosomal genes and their mouse homologs: implications for sex chromosome evolution. Genome Res. 11: 2095-2100.
- 4. Bernardino-Scherri, J., Flagiello, D. and Dutrillaux, B. 2002. Overall DNA methylation and chromatin structure of normal and abnormal X chromosomes. Cytogenet. Genome Res. 99: 85-91.
- 5. Zendman, A.J., Van Kraats, A.A., Weidle, U.H., Ruiter, D.J. and Van Muijen, G.N. 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.
- 6. Bojesen, A., Kristensen, K., Birkebaek, N.H., Fedder, J., Mosekilde, L., Bennett, P., Laurberg, P., Frystyk, J., Flyvbjerg, A., Christiansen, J.S. and Gravholt, C.H. 2006. The metabolic syndrome is frequent in Klinefelter's syndrome and is associated with abdominal obesity and hypogonadism. Diabetes Care 29: 1591-1598.
- 7. Maggio, M.C., Liotta, A., De Grazia, E., Cimador, M., Di Pace, R. and Corsello, G. 2007. Polycystic ovary and gonadoblastoma in Turner's syndrome. Minerva Pediatr. 59: 397-401.

#### **STORAGE**

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

## **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

#### **CHROMOSOMAL LOCATION**

Genetic locus: XAGE2B (human) mapping to Xp11.22.

#### SOURCE

XAGE2B (E-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of XAGE2B of human origin.

#### PRODUCT

Each vial contains 200  $\mu$ g lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-244667 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

XAGE2B (E-16) is recommended for detection of XAGE2B 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).

Molecular Weight of XAGE2B: 12 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.