

XAGE-2 (S-12): sc-169821

BACKGROUND

The GAGE family is comprised of a number of highly homologous acidic proteins involved in immunity and germ cell biology. Expressed most frequently in cancerous tissue, members of the GAGE family are considered potential targets for cancer immunotherapy. XAGE-2 (X antigen family, member 2), also known as GAGED3 (G antigen family D member 3) or CT12.2, is a 111 amino acid protein belonging to the GAGE family and XAGE subfamily. Strongly expressed in normal testis, XAGE-2 is also found in Ewing's sarcoma, rhabdomyosarcoma, and breast cancer and germ cell tumors. XAGE-2 shares high sequence homology with other GAGE/PAGE proteins, and similarly belongs to the CT (cancer-testis) family of antigens.

REFERENCES

1. 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.
2. 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.
3. Shao, J.B. and Chen, Z. 2003. Expression of MAGE, GAGE, and BAGE genes in human hepatocellular carcinoma. *Zhonghua Gan Zang Bing Za Zhi* 11: 142-144.
4. Kong, U., Koo, J., Choi, K., Park, J. and Chang, H. 2004. The expression of GAGE gene can predict aggressive biologic behavior of intestinal type of stomach cancer. *Hepatogastroenterology* 51: 1519-1523.
5. Chen, Y.T., Iseli, C., Venditti, C.A., Old, L.J., Simpson, A.J. and Jongeneel, C.V. 2006. Identification of a new cancer/testis gene family, CT47, among expressed multicopy genes on the human X chromosome. *Genes Chromosomes Cancer* 45: 392-400.
6. Gjerstorff, M.F. and Ditzel, H.J. 2008. An overview of the GAGE cancer/testis antigen family with the inclusion of newly identified members. *Tissue Antigens* 71: 187-192.

CHROMOSOMAL LOCATION

Genetic locus: XAGE2 (human) mapping to Xp11.22.

SOURCE

XAGE-2 (S-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of XAGE-2 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.

Blocking peptide available for competition studies, sc-169821 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

XAGE-2 (S-12) is recommended for detection of XAGE-2 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); non cross-reactive with other XAGE family members.

Suitable for use as control antibody for XAGE-2 siRNA (h): sc-91153, XAGE-2 shRNA Plasmid (h): sc-91153-SH and XAGE-2 shRNA (h) Lentiviral Particles: sc-91153-V.

Molecular Weight of XAGE-2: 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.

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.