SANTA CRUZ BIOTECHNOLOGY, INC.

galectin-8 (T-13): sc-30379

BACKGROUND

Several proteins have been identified as specific markers of prostate cancer, and they may be useful as diagnostic indicators. PSA, prostate specific antigen, is the classical indicator for transformed prostate tissue; however, in addition to being up-regulated in prostate cancer, PSA is also up-regulated in non-malignant conditions, such as benign prostatic hyperplasia prostate. Galectin-8, also known as prostate-specific membrane antigen (PCTA-1), is an additional prostate-specific antigen that is overexpressed only in malignant tumors and therefore is a more specific identifier of malignancies. It is a member of the galectin gene family which mediates bothe cell-cell and cell-matrix interactions in a manner similar to the selectin subgroup of C-type lectins.

REFERENCES

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2. Israeli, R.S., et al. 1993. Molecular cloning of a complementary DNA encoding a prostate-specific membrane antigen. Cancer Res. 53: 227-230.
3. Su, Z.Z., et al. 1996. Surface-epitope masking and expression cloning identifies the human prostate carcinoma tumor antigen gene PCTA-1 a member of the galectin gene family. Proc. Natl. Acad. Sci. USA 93: 7252-7257.
4. Wang, F.L., et al. 1996. Two differentially expressed genes in normal human prostate tissue and in carcinoma. Cancer Res. 56: 3634-3637.
5. Ideo, H., et al. 2003. The N-terminal carbohydrate recognition domain of galectin-8 recognizes specific glycosphingolipids with high affinity. Glycobiology 13: 713-723.
6. Nishi, N., et al. 2003. Galectin-8 modulates neutrophil function via interaction with Integrin aM. Glycobiology 13: 755-763.
7. Zick, Y., et al. 2004. Role of galectin-8 as a modulator of cell adhesion and cell growth. Glycoconj. J. 19: 517-526.
8. Bidon-Wagner, N., et al. 2004. Human galectin-8 isoforms and cancer. Glycoconj. J. 19: 557-563.

CHROMOSOMAL LOCATION

Genetic locus: Lgals8 (mouse) mapping to 13 A1.

SOURCE

galectin-8 (T-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of galectin-8 of mouse 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-30379 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

galectin-8 (T-13) is recommended for detection of galectin-8 of mouse and rat 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 galectin-8 siRNA (m): sc-37430, galectin-8 shRNA Plasmid (m): sc-37430-SH and galectin-8 shRNA (m) Lentiviral Particles: sc-37430-V.

Molecular Weight of galectin-8: 35 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210.

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.

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.