SANTA CRUZ BIOTECHNOLOGY, INC.

galectin-8 (H-80): sc-28254

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 upregulated in prostate cancer, PSA is also upregulated 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 both cell-cell and cell-matrix interactions in a manner similar to the selectin subgroup of C-type lectins.

REFERENCES

1. Pretlow, T.G., et al. 1991. Tissue concentrations of prostate-specific antigen in prostatic carcinoma and benign prostatic hyperplasia. Int. J. Cancer 49: 645-649.
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 αM. 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.

CHROMOSOMAL LOCATION

Genetic locus: LGALS8 (human) mapping to 1q43; Lgals8 (mouse) mapping to 13 A1.

SOURCE

galectin-8 (H-80) is a rabbit polyclonal antibody raised against amino acids 141-220 mapping within an internal region of galectin-8 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.

APPLICATIONS

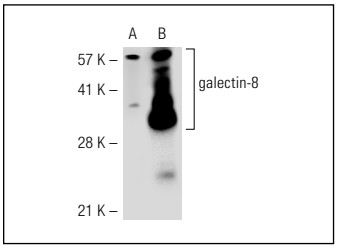
galectin-8 (H-80) is recommended for detection of galectin-8 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 (h): sc-37429, galectin-8 siRNA (m): sc-37430, galectin-8 shRNA Plasmid (h): sc-37429-SH, galectin-8 shRNA Plasmid (m): sc-37430-SH, galectin-8 shRNA (h) Lentiviral Particles: sc-37429-V and galectin-8 shRNA (m) Lentiviral Particles: sc-37430-V.

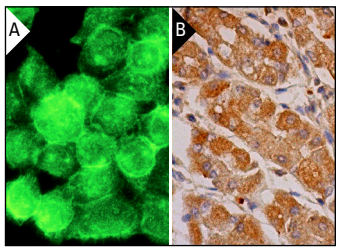
Molecular Weight of galectin-8: 35 kDa.

Positive Controls: galectin-8 (h): 293 Lysate: sc-113277, NIH/3T3 whole cell lysate: sc-2210 or HeLa whole cell lysate: sc-2200.

DATA



galectin-8 (H-80): sc-28254. Western blot analysis of galectin-8 expression in non-transfected: sc-110760 (**A**) and human galectin-8 transfected: sc-113277 (**B**) 293 whole cell lysates.



galectin-8 (H-80): sc-28254. Immunofluorescence staining of methanol-fixed HeLa cells showing cell surface localization (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human lower stomach tissue showing cytoplasmic staining of glandular cells (**B**).

SELECT PRODUCT CITATIONS

1. Dong, G.W., et al. 2009. Galectin-8 expression in laryngeal squamous cell carcinoma. Clin. Exp. Otorhinolaryngol. 2: 13-19.

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.