SANTA CRUZ BIOTECHNOLOGY, INC.

Glycodelin (001-16-1): sc-80479

BACKGROUND

Glycodelin (also designated GD, placental protein 14, PP14, progesterone-associated endometrial protein, progestagen-associated endometrial protein, pregnancy-associated endometrial α_2-globulin, PAEG or PEG) is a glycoprotein with structural homology to β-lactoglobulins. Glycodelin is synthesized by the secretory endometrium and decidua during embryo implantation and in the first few weeks of pregnancy. It is expressed in steroid responsive tissues of the female reproductive tract and in the paranucleolar vacuole, which is characteristically present in lobular breast cancer cells. Glycodelin expression in breast cancer cells is accompanied by the acquisition of a phenotype of organized glandular epithelium.

REFERENCES

1. Bell, S.C., Keyte, J.W. and Waites, G.T. 1987. Pregnancy-associated endometrial α_2-globulin, the major secretory protein of the luteal phase and first trimester pregnancy endometrium, is not glycosylated Prolactin but related to β-lactoglobulins. J. Clin. Endocrinol. Metab. 65: 1067-1071.
2. Huhtala, M.L., Seppala, M., Narvanen, A., Palomaki, P., Julkunen, M. and Bohn, H. 1987. Amino acid sequence homology between human placental protein 14 and β-lactoglobulins from various species. Endocrinology 120: 2620-2622.
3. Julkunen, M., Seppala, M. and Janne, O.A. 1988. Complete amino acid sequence of human placental protein 14: a progesterone-regulated uterine protein homologous to β-lactoglobulins. Proc. Natl. Acad. Sci. USA 85: 8845-8849.
4. Vaisse, C., Atger, M., Potier, B. and Milgrom, E. 1990. Human placental protein 14 gene: sequence and characterization of a short duplication. DNA Cell Biol. 9: 401-413.
5. Garde, J., Bell, S.C. and Eperon, I.C. 1991. Multiple forms of mRNA encoding human pregnancy-associated endometrial α_2-globulin, a β-lactoglobulin homologue. Proc. Natl. Acad. Sci. USA 88: 2456-2460.
6. Dell, A., Morris, H.R., Easton, R.L., Panico, M., Patankar, M., Oehniger, S., Koistinen, R., Koistinen, H., Seppala, M. and Clark, G.F. 1995. Structural analysis of the oligosaccharides derived from Glycodelin, a human glycoprotein with potent immunosuppressive and contraceptive activities. J. Biol. Chem. 270: 24116-24126.
7. Kamarainen, M., Halttunen, M., Koistinen, R., von Boguslawsky, K., von Smitten, K., Andersson, L.C. and Seppala, M. 1999. Expression of Glycodelin in human breast and breast cancer. Int. J. Cancer 83: 738-742.

CHROMOSOMAL LOCATION

Genetic locus: PAEP (human) mapping to 9q34.3.

SOURCE

Glycodelin (001-16-1) is a mouse monoclonal antibody raised against human Glycodelin purified from second trimester amniotic fluid.

RESEARCH USE

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

PRODUCT

Each vial contains 100 µg IgG_1 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

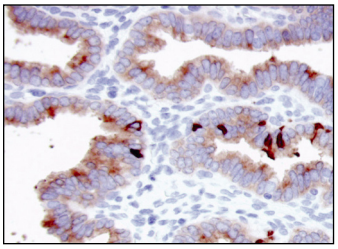
APPLICATIONS

Glycodelin (001-16-1) is recommended for detection of Glycodelin of human origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for Glycodelin siRNA (h): sc-43807, Glycodelin shRNA Plasmid (h): sc-43807-SH and Glycodelin shRNA (h) Lentiviral Particles: sc-43807-V.

Molecular Weight of Glycodelin: 28 kDa.

DATA



Glycodelin (001-16-1): sc-80479. Immunoperoxidase staining of formalin fixed, paraffin-embedded human endometrium tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Ren, S., Liu, S., Howell, P.M., Jr., Zhang, G., Pannell, L., Samant, R., Shevde-Samant, L., Tucker, J.A., Fodstad, O. and Riker, A.I. 2010. Functional characterization of the progestagen-associated endometrial protein gene in human melanoma. J. Cell. Mol. Med. 14: 1432-1442.

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 for detailed protocols and support products.