

Glycodelin (FL-180): sc-134479

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 -lactoglobulins 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 (FL-180) is a rabbit polyclonal antibody raised against amino acids 1-180 representing full length Glycodelin of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Glycodelin (FL-180) is recommended for detection of Glycodelin of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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 Glycodelin: 28 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.



Try **Glycodelin (001-16-1): sc-80479**, our highly recommended monoclonal alternative to Glycodelin (FL-180).