# Glycodelin (N-20): sc-12289



The Power to Question

## **BACKGROUND**

Glycodelin (also designated GD, placental protein 14, PP14, progesterone-associated endometrial protein, progestagen-associated endometrial protein, pregnancy-associated endometrial  $\alpha\text{-}2$  globulin, PAEG or PEG) is a glycoprotein with structural homology to  $\beta\text{-}lactoglobulins.}$  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**

- Bell, S.C., et al. 1987. Pregnancy-associated endometrial α2 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.
- Huhtala, M.L., et al. 1987. Amino acid sequence homology between human placental protein 14 and β-lactoglobulins from various species. Endocrinology 120: 2620-2622.

#### CHROMOSOMAL LOCATION

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

## SOURCE

Glycodelin (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Glycodelin of human origin.

## **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-12289 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **APPLICATIONS**

Glycodelin (N-20) 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 µg per 100-500 µg 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).

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.

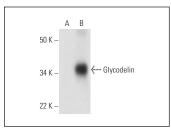
Molecular Weight of Glycodelin: 28 kDa.

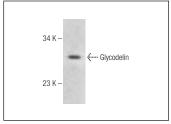
Positive Controls: U-937 cell lysate: sc-2239 or Glycodelin (h): 293T Lysate: sc-371648.

#### **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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

## **DATA**





Glycodelin (N-20): sc-12289. Western blot analysis of Glycodelin expression in non-transfected: sc-117752 (A) and human Glycodelin transfected: sc-371648 (B) 2921 whole scall heater

Glycodelin (N-20): sc-12289. Western blot analysis of Glycodelin expression in U-937 whole cell lysate.

## **SELECT PRODUCT CITATIONS**

- Uchida, H., et al. 2007. Histone deacetylase inhibitor-induced Glycodelin enhances the initial step of implantation. Hum. Reprod. 22: 2615-2622.
- Schneider, M.A., et al. 2015. Glycodelin: a new biomarker with immunomodulatory functions in non-small cell lung cancer. Clin. Cancer Res. 21: 3529-3540.

## **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.



Try **Glycodelin (001-16-1):** sc-80479, our highly recommended monoclonal alternative to Glycodelin (N-20).