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Rabbit Anti-GCNT2 antibody

SL13316R

Product Name:	GCNT2
Chinese Name:	β1-6 N-乙酰氨基葡萄糖转移酶2抗体
Alias:	bA360O19.2; bA421M1.1; Beta 1 6 N acetylglucosaminyltransferase 2; CCAT; GCNT 2; GCNT2C; GCNT5; Glucosaminyl (N acetyl) transferase 2 I branching enzyme (I blood group); Glucosaminyl (N acetyl) transferase 2 I branching enzyme; I beta 1 6 N acetylglucosaminyltransferase; I branching beta 1 6 acetylglucosaminyltransferase; I branching enzyme; IGNT; II; Ii blood group; MGC163396; N acetylglucosaminyltransferase; N acetyllactosaminide beta 1 6 N acetylglucosaminyltransferase; NACGT1; NAGCT1; ULG3.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Horse,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=0.2ug/testICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	46kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human GCNT2:151-250/400
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Belonging to the glycosyltransferase 14 family, GCNT2 (glucosaminyl (N-acetyl)

transferase 2, I-branching enzyme (I blood group)), also known as II, N-acetylglucosaminyltransferase, IGNT, CCAT, ULG3, GCNT5, GCNT2C or NACGT1, is a 400 amino acid glycosyltransferase that localizes to the Golgi apparatus. Other members of the glycosyltransferase 14 family include GCNT1, GCNT3, GCNT4, GCNT6 and GCNT7. A single-pass type II membrane protein, GCNT2 functions as a branching enzyme known as beta-1,6-N-acetylglucosaminyltransferase, which converts fetal i antigen to adult I antigen in erythrocytes during embryonic development. With expression levels increasing significantly during oncogenesis and development, GCNT2 is found at highest levels in adult prostate and fetal brain, and is found at low levels in heart, small intestine, colon, brain, pancreas and kidney.

Function:
GCNT2 is the I-branching enzyme, a beta-1,6-N-acetylglucosaminyltransferase that converts linear into branched poly-N-acetyllactosaminoglycans and is responsible for the conversion of fetal i antigen to adult I antigen in erythrocytes during embryonic development. Mutations in this gene have been associated with adult i blood group phenotype. Alternatively spliced transcript variants encoding 3 different isoforms have been described.

Subcellular Location:
Golgi apparatus membrane.

Tissue Specificity:
In the adult, highly expressed in prostate and to a lesser extent in small intestine and colon. Barely detected in heart, brain, kidney and pancreas. No expression in placenta, lung, liver, skeletal muscle, spleen, thymus, testis, ovary and peripheral blood leukocytes. In fetus, highly expressed in brain and to a lesser extent in lung and kidney. Barely detected in liver.

Similarity:
Belongs to the glycosyltransferase 14 family.

SWISS:
Q8N0V5

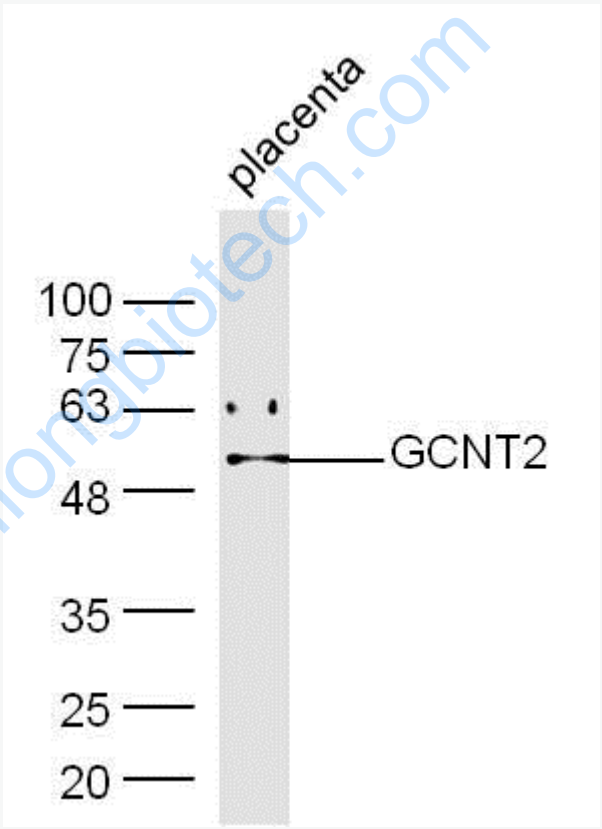
Gene ID:
2651

Database links:

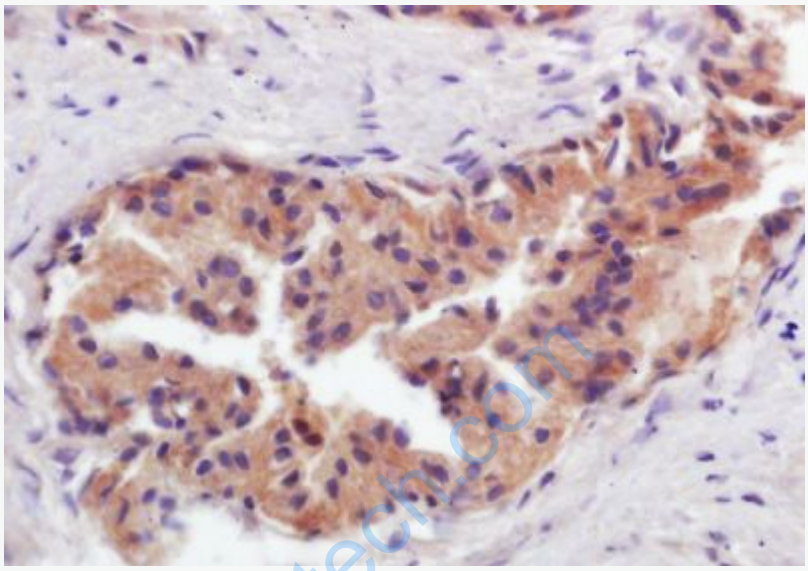
Entrez Gene: 2651Human

Entrez Gene: 14538Mouse

Omim: 600429Human

	SwissProt: Q8N0V5Human SwissProt: P97402Mouse Unigene: 519884Human **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Picture:	 Sample: Placenta (Mouse) Lysate at 40 ug Primary: Anti-GCNT2(SL13316R) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 46 kD

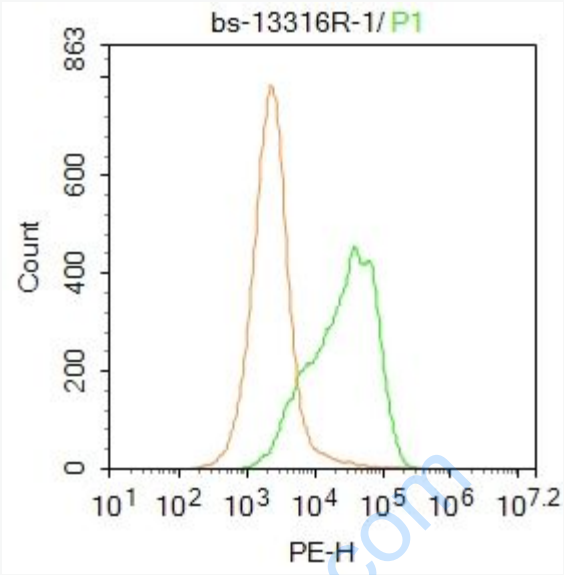
Observed band size: 56 kD



Tissue/cell: human prostate gland; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;

Incubation: Anti-GCNT2 Polyclonal Antibody, Unconjugated(SL13316R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control:A549.

Primary Antibody (green line): Rabbit Anti-GCNT2 antibody (SL13316R)

Dilution: 1μg /10^6 cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody : Goat anti-rabbit IgG-PE

Dilution:0.2μg /test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 20% PBST for 20 min at room temperature. The cells were then incubated in 5% BSA to block non-specific protein-protein interactions for 30 min at at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.