For Research Use Only

GCNT2 Polyclonal antibody

Catalog Number:18118-1-AP 2 Publications

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Basic Information

Catalog Number:
18118-1-AP

Size:
150ul , Concentration: 300 ug/ml by Nanodrop and 147 ug/ml by Bradford method using BSA as the standard;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG12635

GenBank Accession Number:
BC074801

GeneID (NCBI):
2651

UNIPROT ID:
Q8N0V5

Full Name:
glucosaminyl (N-acetyl) transferase 2, I-branching enzyme (I blood group)

Calculated MW:
400 aa, 46 kDa

Observed MW:
46 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB 1:500-1:1000
IHC 1:50-1:500

Applications

Tested Applications:
WB, IHC, ELISA

Cited Applications:
WB

Species Specificity:
human, mouse, rat

Cited Species:
human

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : mouse kidney tissue, HEK-293 cells

IHC : human liver tissue, human colon tissue, human breast cancer tissue, mouse liver tissue

Background Information

GCNT2 (N-acetyllactosaminide beta-1,6-N-acetylglucosaminyl-transferase) catalyzes the transfer of N-acetylglucosamine to the carbon-6 position of galactose. The loss of GCNT2 expression and corresponding loss of I-antigen in melanoma cells has profound effects on key oncogenic signaling pathways, including integrin-mediated signaling pathways critical for metastasis (PMID: 33660254, 30135430). Alterations in GCNT2 expression have now been associated with multiple malignancies, with high GCNT2 promoting tumor progression in a majority of investigated cancers. Three GCNT2 splicing variants GCNT2A, -B, and -C, which differ at exon 1 but have identical exon 2 and 3 coding regions, are expressed differentially in specific tissues (PMID: 15161861). GCNT2C determines the expression of the blood group I antigen in erythrocytes.

Notable Publications

Author	Pubmed ID	Journal	Application
Yannan Qin	28100567	Glycobiology	WB
Yuan Zhou	38849695	Cell Biochem Biophys	WB

Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
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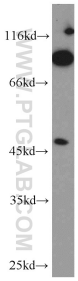
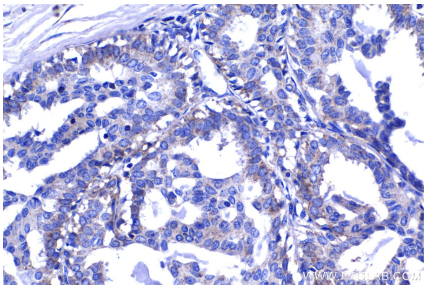
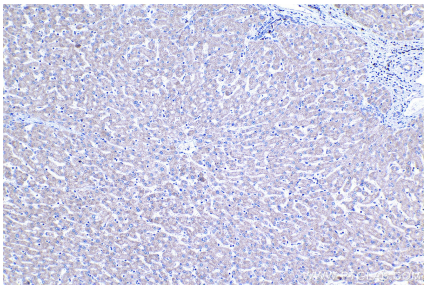
Selected Validation Data



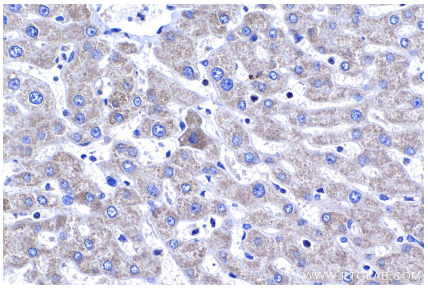
mouse kidney tissue were subjected to SDS PAGE followed by western blot with 18118-1-AP (GCNT2 antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



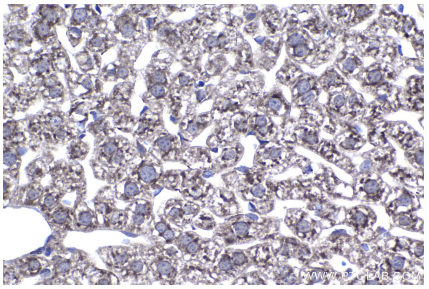
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 18118-1-AP (GCNT2 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 18118-1-AP (GCNT2 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human liver tissue slide using 18118-1-AP (GCNT2 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 18118-1-AP (GCNT2 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).