

For Research Use Only

Glypican 4 Polyclonal antibody

Catalog Number: 13048-1-AP

Featured Product

16 Publications



Basic Information

Catalog Number:

13048-1-AP

Size:

650 ug/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG3670

GenBank Accession Number:

BC017166

GeneID (NCBI):

2239

UNIPROT ID:

O75487

Full Name:

glypican 4

Calculated MW:

556 aa, 62 kDa

Observed MW:

62 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:2000-1:10000

IHC 1:500-1:2000

IF/ICC 1:200-1:800

Applications

Tested Applications:

WB, IHC, IF/ICC, ELISA

Cited Applications:

WB, IHC, IF

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse

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 brain tissue, mouse kidney tissue, rat brain tissue

IHC : human stomach tissue,

IF/ICC : U-251 cells,

Background Information

Glypicans (GPCs) are a family of glycosylphosphatidylinositol (GPI)-anchored heparan sulphate proteoglycans (HSPGs) that may play a role in the control of cell division and growth regulation (PMID: 9931407). In mammals, there are six GPCs (GPC1 to GPC6), all of which have a similar core-protein size of approx. 60 kDa and the clustering of glycosaminoglycan attachment site near the C-terminus (PMID: 10585884). They are tethered to the cell surface by GPI linkages, which can be cleaved by endogenous phospholipases, thus releasing the protein. Human GPC4 is a 556-amino acid protein, and shows 93.5% identity to mouse K-glypican. The gene of GPC4 has been mapped to Xq26, and its mRNA is widely expressed in human tissues, including lung, kidney, heart, placenta, skeletal muscle, and pancreas. GPC4 has also been shown to be present in astrocytes, haematopoietic-progenitor and bone-marrow-stromal cells. Studies suggest that GPC4 is involved in the regulation of Wnt signaling and astrocyte GPC4 plays a role in formation of excitatory synapses (PMID: 22302992; 22722203). This antibody can recognize both full length (65 kDa) and cleaved (35 kDa) GPC4 as well as GPC6 (PMID: 18055828; 22722203).

Notable Publications

Author	Pubmed ID	Journal	Application
Yan Xiong	27425250	Biochem Biophys Res Commun	WB,IF
Isabella Farhy-Tselnick	34494546	Elife	WB
Yuan Fang	31484922	Nat Commun	IHC,IF

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

For technical support and original validation data for this product please contact:

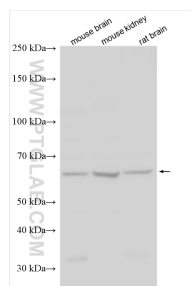
T: 4006900926

E: Proteintech-CN@ptglab.com

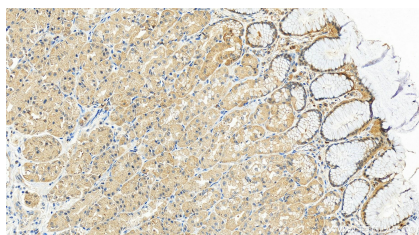
W: ptgcn.com

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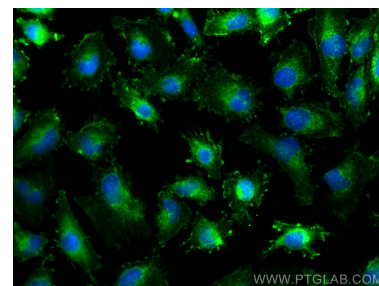
Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 13048-1-AP (Glypican 4 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human stomach tissue slide using 13048-1-AP (Glypican 4 antibody) at dilution of 1:1000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed U-251 cells using Glypican 4 antibody (13048-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).