

For Research Use Only

# Glypican 4 Polyclonal antibody

Catalog Number: 13048-1-AP

Featured Product

18 Publications



## Basic Information

### Catalog Number:

13048-1-AP

### Size:

150ul, Concentration: 650 ug/ml by Nanodrop;

### 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, 30 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-Tselnicker	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, pH7.3

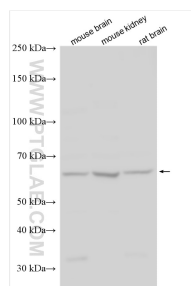
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

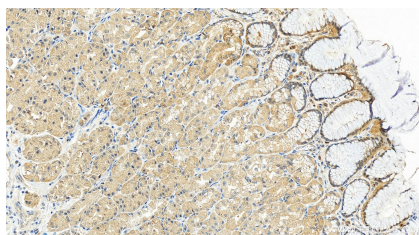
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

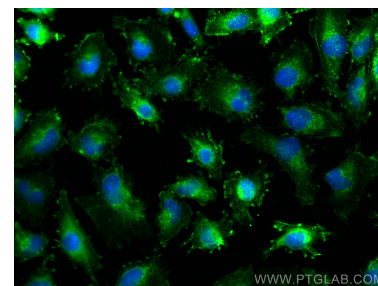
## Selected Validation Data



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).