

For Research Use Only

# GCSH Polyclonal antibody

Catalog Number:16726-1-AP

Featured Product

14 Publications



## Basic Information

**Catalog Number:**

16726-1-AP

**Concentration:**

450 ug/ml

**Source:**

Rabbit

**Isotype:**

IgG

**Immunogen Catalog Number:**

AG10174

**GenBank Accession Number:**

BC000790

**GeneID (NCBI):**

2653

**UNIPROT ID:**

P23434

**Full Name:**

glycine cleavage system protein H  
(aminomethyl carrier)

**Calculated MW:**

19 kDa

**Observed MW:**

15 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB 1:500-1:3000

IP 0.5-4.0 ug for 1.0-3.0 mg of total  
protein lysate

IHC 1:50-1:500

IF/ICC 1:10-1:100

## Applications

**Tested Applications:**

WB, IHC, IF/ICC, IP, ELISA

**Cited Applications:**

WB, IHC, IF

**Species Specificity:**

human, mouse, rat

**Cited Species:**

human, mouse, rat

**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:** HEK-293 cells, HeLa cells, human liver tissue,  
mouse brain tissue, mouse kidney tissue

**IP:** mouse kidney tissue,

**IHC:** human ovary cancer tissue, human kidney tissue,  
human liver tissue, human ovary tissue, human skin  
tissue, rat ovary tissue

**IF/ICC:** MCF-7 cells, HepG2 cells

## Background Information

GCSH(Glycine cleavage system H protein, mitochondrial) is a component of the glycine cleavage system loosely associated with the mitochondrial inner membrane and has lipoic acid as a prosthetic group. The full-length GCSH cDNA encodes a precursor protein of 173 amino acids and a mature protein of 125 amino acids. The lipoylation of H-protein occurs in mitochondria which probably contain an activated form of lipoic acid as well as other components required for the transfer of lipoic acid to the protein(PMID:2211640). Defects in GCSH are a cause of non-ketotic hyperglycinemia (NKH).

## Notable Publications

Author	Pubmed ID	Journal	Application
Shengya Tian	31562192	Life Sci Alliance	WB
Anna Adamus	30337557	Sci Rep	WB,IHC,IF
Rebecca M Simmons	33057941	Amino Acids	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

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

T: 4006900926

E: Proteintech-CN@ptglab.com

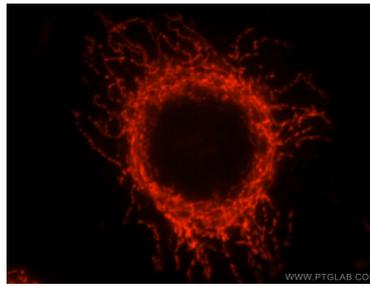
W: ptgcn.com

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

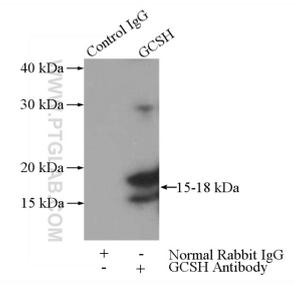
## Selected Validation Data



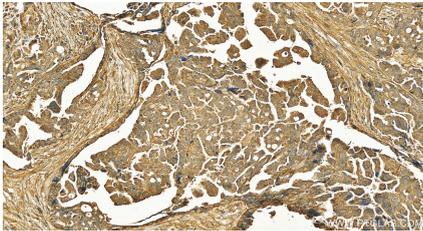
HEK-293 cells were subjected to SDS PAGE followed by western blot with 16726-1-AP (GCSH antibody) at dilution of 1:500 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of MCF-7 cells, using GCSH antibody 16726-1-AP at 1:25 dilution and Rhodamine-labeled goat anti-rabbit IgG (red).



IP result of anti-GCSH (IP:16726-1-AP, 3ug; Detection:16726-1-AP 1:1000) with mouse kidney tissue lysate 4000ug.



Immunohistochemical analysis of paraffin-embedded human ovarian cancer slide using 16726-1-AP (GCSH antibody) at dilution of 1:200 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).