

À des fins de recherche uniquement

# Anticorps Polyclonal de lapin anti-Gamma Cystathionase



Numéro de catalogue: 12217-1-AP

Phare

172 Publications

## Informations de base

Numéro de catalogue:

12217-1-AP

Taille:

150ul, Concentration: 550 µg/ml by Nanodrop;

Hôte:

Lapin

Isotype:

IgG

Immunogen Catalog Number:

AG2872

Numéro d'acquisition GenBank:

BC015807

Identification du gène (NCBI):

1491

Nom complet:

cystathionase (cystathionine gamma-lyase)

MW calculé

405 aa, 45 kDa

MW observés:

40-45 kDa

Méthode de purification:

Purification par affinité contre l'antigène

Dilutions recommandées:

WB 1:1000-1:4000

IP 0.5-4.0 µg for IP and 1:500-1:1000 for WB

IHC 1:100-1:500

IF 1:200-1:800

## Applications

Applications testées:

FC, IF, IHC, IP, WB, ELISA

Demandes citées:

Cell treatment, CoIP, IF, IHC, IP, WB

Spécificité de l'espèce:

Humain, rat, souris

Espèces citées:

Humain, Lapin, rat, souris

**Remarque-IHC: il est suggéré de démasquer l'antigène avec un tampon de TE buffer pH 9,0; (\*) À défaut, 'le démasquage de l'antigène peut être effectué avec un tampon citrate pH 6,0.**

Contrôles positifs:

WB : tissu rénal de souris, cellules HEK-293, cellules HeLa, cellules HepG2, tissu cardiaque de rat, tissu cardiaque de souris, tissu hépatique de rat, tissu hépatique de souris, tissu rénal de rat

IP : tissu hépatique de souris,

IHC : tissu de cancer du foie humain, tissu de cancer du sein humain, tissu rénal humain

IF : tissu de cancer du foie humain, cellules HepG2

## Informations générales

CTH, also named as Gamma-cystathionase and CSE, belongs to the transsulfuration enzymes family. It catalyzes the last step in the transsulfuration pathway from methionine to cysteine. CTH converts two cysteine molecules to lanthionine and hydrogen sulfide. CTH can also accept homocysteine as substrate. Its specificity depends on the levels of the endogenous substrates. CTH is the major H<sub>2</sub>S-producing enzyme in kidney, liver, vascular smooth muscle cells and enterocytes. The endogenous production of H<sub>2</sub>S plays a significant role in the regulation of cellular functions, including cell growth, hyperpolarization of cell membranes, modulation of neuronal excitability and relaxation of smooth muscle cells. The CSE/H<sub>2</sub>S pathway is upregulated in the heart in a murine model of CVB3-induced myocarditis and that inhibition of endogenous H<sub>2</sub>S is beneficial to treatment early in the disease while administration of exogenous H<sub>2</sub>S is protective to infected myocardium during the later stage. Mutations in the gene encoding CTH can result in the autosomal recessive disease cystathioninuria; a disorder characterized by the unusual accumulation of plasma cystathionine causing increased urinary excretion. Both male and female CTH-null mice showed hypercystathioninemia and hyperhomocysteinemia, but not hypermethioninemia. CSE has also been reported to be expressed in endothelial cells and contribute to endothelium-dependent vasorelaxation. It can be detected a minor 36 kDa band probably representing a degradative intermediate except the major 43 kDa band in vitamin B6-deficient rat liver (PMID:8660672). CTH also can be detected as ~70kD in rat liver (PMID: 18974309). This antibody is a rabbit polyclonal antibody raised against residues near the C terminus of human CTH.

## Publications notables

Autrice	Pubmed ID	Journal	Application
Yu Sun	34562065	J Cell Mol Med	WB
Lisette Carolina Sanchez-Aranguren	32978411	Sci Rep	WB
Pilar González-García	32975579	Hum Mol Genet	WB

## Stockage

Stockage:

Stocker à -20°C. Stable pendant un an après l'expédition.

Tampon de stockage:

PBS avec azoture de sodium à 0,02 % et glycérol à 50 % pH 7,3

L'aliquotage n'est pas nécessaire pour le stockage à -20C

\*\*\* Les 20ul contiennent 0,1% de BSA.

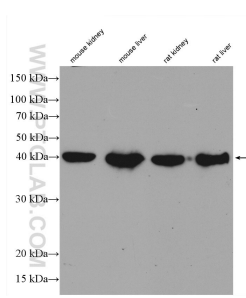
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

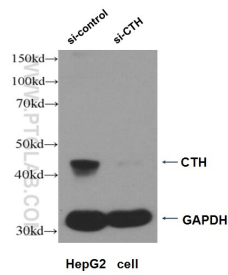
E: proteintech@ptglab.com  
W: ptglab.com

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

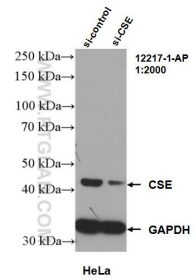
## Données de validation sélectionnées



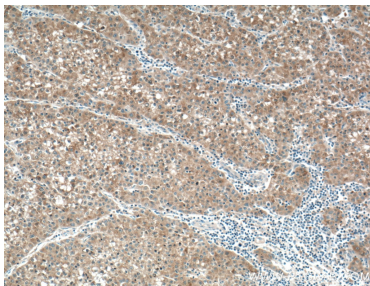
Various lysates were subjected to SDS PAGE followed by western blot with 12217-1-AP (Gamma cystathionase antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



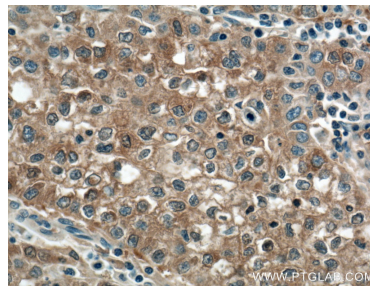
WB result of CTH antibody (12217-1-AP, 1:500) with si-control and si-CTH transfected HepG2 cell.



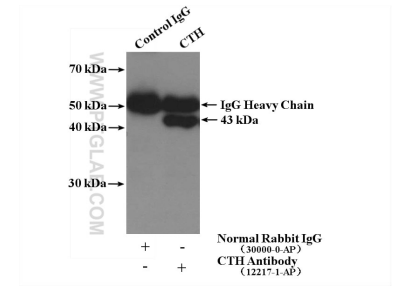
WB result of Gamma cystathionase antibody (12217-1-AP; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Gamma cystathionase transfected HeLa cells.



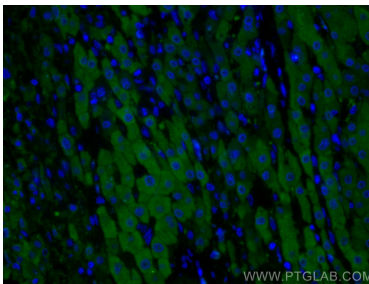
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 12217-1-AP (Gamma cystathionase antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



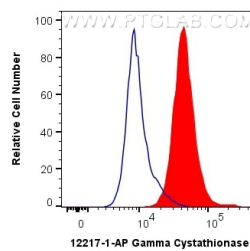
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 12217-1-AP (Gamma cystathionase antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-Gamma cystathionase (IP:12217-1-AP, 4ug; Detection:12217-1-AP 1:600) with mouse liver tissue lysate 4000 ug.



Immunofluorescent analysis of (4% PFA) fixed human liver cancer tissue using Gamma Cystathionase antibody (12217-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



$1 \times 10^6$  MCF-7 cells were intracellularly stained with 0.4 ug Anti-Human Gamma Cystathionase (12217-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).