

# Gamma Cystathionase Monoklonaler Antikörper

Katalog-Nr.: 60234-1-Ig

Vorgestelltes Produkt

20 Publikationen

## Allgemeine Informationen

<b>Katalog-Nr.:</b> 60234-1-Ig	<b>GenBank-Zugangsnummer:</b> BC015807	<b>Reinigungsmethode:</b> Protein-A-Reinigung
<b>Größe:</b> 150ul, Konzentration: 1700 µg/ml von 1491 Nanodrop und 1000 µg/ml durch die Bradford-Methode mit BSA als Standard;	<b>GeneID (NCBI):</b> 1491	<b>CloneNo.:</b> 2C7F9
<b>Wirt:</b> Maus	<b>Vollständiger Name:</b> cystathionase (cystathionine gamma-lyase)	<b>Empfohlene Verdünnungen:</b> WB 1:5000-1:50000 IHC 1:200-1:800 IF 1:20-1:200
<b>Isotyp:</b> IgG1	<b>Berechnete Masse:</b> 405 aa, 45 kDa	
<b>Immunogen Katalognummer:</b> AG2872	<b>Beobachtete Masse:</b> 40-45 kDa	

## Anwendungen

### Geprüfte Anwendungen:

IF, IHC, WB, ELISA

### In Publikationen genannte Anwendungen:

IF, IHC, WB

### Getestete Reaktivität:

Human, Maus, Ratte

### Zitierte Arten:

Human, Hund, Maus, Ratte

**Hinweis-IHC: Antigendemaskierung mit TE-Puffer pH 9,0 empfohlen. (\*) Wahlweise kann die Antigendemaskierung auch mit Citratpuffer pH 6,0 erfolgen.**

### Positivkontrollen:

**WB:** LNCaP-Zellen, A431-Zellen, HEK-293-Zellen, HeLa-Zellen, HepG2-Zellen, K-562-Zellen, NIH/3T3-Zellen, PC-3-Zellen

**IHC:** humanes Lungenkarzinomgewebe, humanes Leberkarzinomgewebe

**IF:** HepG2-Zellen,

## Hintergrundinformationen

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 lantionine 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).

## Bemerkenswerte Veröffentlichungen

Verfasser	Pubmed ID	Journal	Anwendung
Lara Testai	27616550	Pharmacol Res	WB
Xubo Chen	29038536	Sci Rep	WB
Elisabetta Panza	35605291	Biomed Pharmacother	WB

## Lagerung

### Lagerungsbedingungen:

Bei -20°C lagern. Nach dem Versand ein Jahr lang stabil

### Lagerungspuffer:

PBS mit 0.02% Natriumazid und 50% Glycerin pH 7.3.

Aliquotieren ist nicht notwendig bei -20°C Lagerung

\*\*\* 20ul-Größen enthalten 0.1% BSA

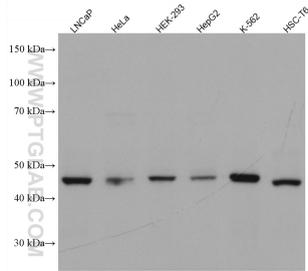
For technical support and original validation data for this product please contact:

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

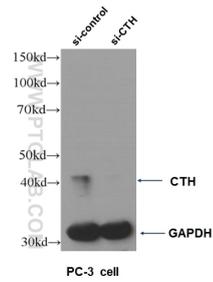
E: proteintech@ptglab.com  
W: ptglab.com

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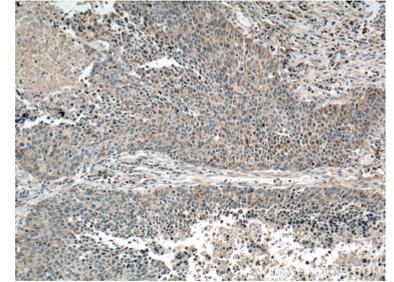
## Ausgewählte Validierungsdaten



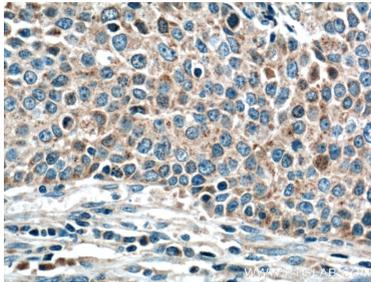
Various lysates were subjected to SDS PAGE followed by western blot with 60234-1-Ig (Gamma Cystathionase antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



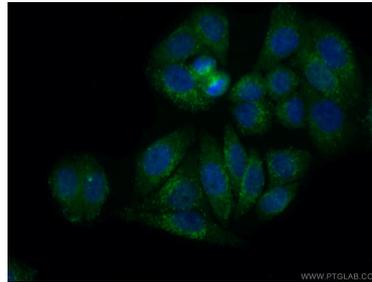
WB result of CTH antibody (60234-1-Ig, 1:500) with si-control and si-CTH transfected PC-3 cells.



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 60234-1-Ig (Gamma cystathionase antibody at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 60234-1-Ig (Gamma cystathionase antibody at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (10% Formaldehyde ) fixed HepG2 cells using 60234-1-Ig (Gamma cystathionase antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG(H+L).