Nur für Forschungszwecke

Gamma Cystathionase Polyklonaler Antikörper

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Antibodies | ELISA kits | Proteins
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Katalog-Nr.:12217-1-AP | Vorgestelltes Produkt | 169 Publikationen

Allgemeine Informationen

Katalog-Nr.:
12217-1-AP

Größe:
150ul , Konzentration: 550 μg/ml von Nanodrop;

Wirt:
Kaninchen

Isotyp:
IgG

Immunogen Katalognummer:
AG2872

GenBank-Zugangsnummer:
BC015807

GeneID (NCBI):
1491

Vollständiger Name:
cystathionase (cystathionine gamma-lyase)

Berechneté Masse:
405 aa, 45 kDa

Beobachteté Masse:
40-45 kDa

Reinigungsmethode:
Antigen-Affinitätsreinigung

Empfohlene Verdünnungen:
WB 1:1000-1:4000
IP 0.5-4.0 ug für IP und 1:500-1:1000 für WB
IHC 1:100-1:500
IF 1:200-1:800

Anwendungen

Geprüfte Anwendungen:
FC, IF, IHC, IP, WB, ELISA

In Publikationen genannte Anwendungen:
Cell treatment, CoIP, IF, IHC, IP, WB

Getestete Reaktivität:
Human, Maus, Ratte

Zitierte Arten:
Human, Kaninchen, 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 : Mausnierengewebe, HEK-293-Zellen, HeLa-Zellen, HepG2-Zellen, Mausherzgewebe, Mauslebergewebe, Rattenherzgewebe, Rattenlebergewebe, Rattennierengewebe

IP : Mauslebergewebe,

IHC : humanes Leberkarzinomgewebe, humanes Mammakarzinomgewebe, humanes Nierengewebe

IF : humanes Leberkarzinomgewebe, 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 lanthionine and hydrogen sulfide. CTH can also accept homocysteine as substrate. It specificity depends on the levels of the endogenous substrates. CTH is the major H2S-producing enzyme in kidney, liver, vascular smooth muscle cells and enterocytes. The endogenous production of H2S 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/H2S pathway is upregulated in the heart in a murine model of CVB3-induced myocarditis and that inhibition of endogenous H2S is beneficial to treatment early in the disease while administration of exogenous H2S 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.

Bemerkenswerte Veröffentlichungen

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

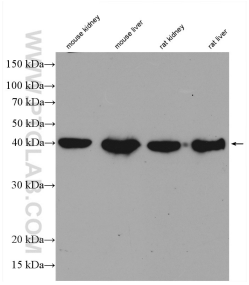
Lagerung

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

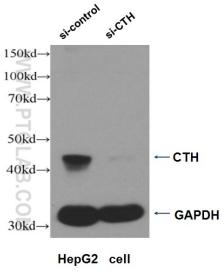
*** 20ul-Größen enthalten 0.1% BSA

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

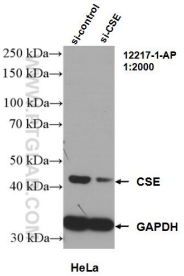
Ausgewählte Validierungsdaten



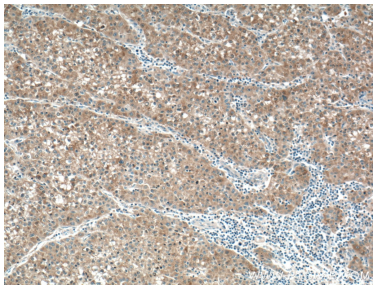
Various lysates were subjected to SDS PAGE followed by western blot with 12217-1-AP (Gamma cystathionase antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



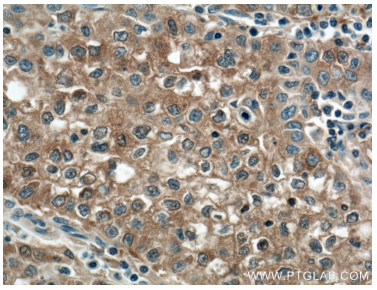
WB result of CTH antibody (12217-1-AP, 1:500) with si-control and si-CTH transfected HepG2 cell.



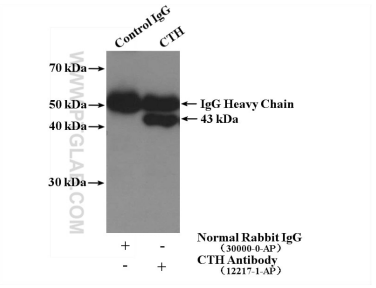
WB result of Gamma cystathionase antibody (12217-1-AP; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-Gamma cystathionase transfected HeLa cells.



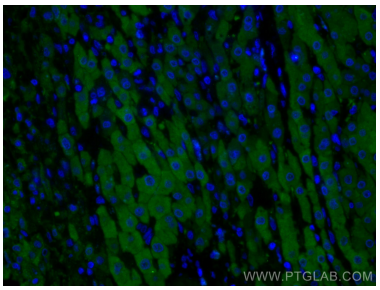
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 12217-1-AP (Gamma cystathionase antibody at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



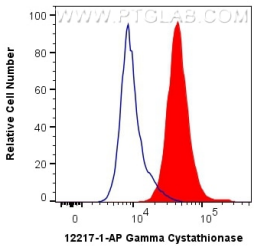
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 12217-1-AP (Gamma cystathionase antibody at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).



1X10^6 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).