



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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## CTH monoclonal antibody (M02), clone 2E12-1C10

Catalog # : H00001491-M02

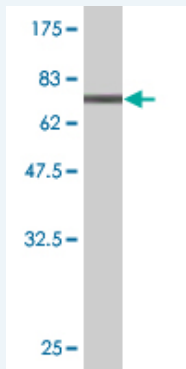
規格 : [ 100 ug ]

[List All](#)

### Specification

<b>Product Description:</b>	Mouse monoclonal antibody raised against a full length recombinant CTH.
<b>Immunogen:</b>	CTH (AAH15807, 1 a.a. ~ 405 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
<b>Sequence:</b>	MQEKDASSQGFLPHFQHFATQAIHVGQDPEQWTSRAVVPPISLSTTFK QGAPGQHSQFEYSRSGNPTRNCLEKAVAALDGAKYCLAFASGLAATVTI THLLKAGDQIICMDDVYGGTNRQYFRQVASEFGLKISFVDCSKIKLEAAIT PETKLWWIETPTNPTQKVIDIEGCAHIVHKHGDIIIVDNTFMSPYFQRPLA LGADISMYSATKYMNGRSDVVMGLVSVNCESLHNRLRFLQNSLGAVPSP DCYLCNRGLKTLHVRMEKHFKNMVAQAFLSNPWVEKVIYPGLPSHPQ HELVKRQCTGCTGMVTFYIKGTLQHAEIFLKNLKLFTLAESLGGFESLAE LPAIMTHASVLKNDRDVLGISDTLIRLSVGLLEDEEDLLEDLDQALKAHPP SGSHS
<b>Host:</b>	Mouse
<b>Reactivity:</b>	Human
<b>Isotype:</b>	IgG1 Kappa

**Quality Control Testing:** Antibody Reactive Against Recombinant Protein.



Western Blot detection against Immunogen (70.07 KDa) .

**Storage Buffer:** In 1x PBS, pH 7.4

**Storage Instruction:** Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

**MSDS:** [Download](#)

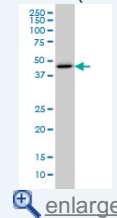
**Datasheet:** [Download](#)

### Publication Reference

- [Hydrogen Sulfide Is a Novel Regulator of Bone Formation Implicated in the Bone Loss Induced by Estrogen Deficiency.](#)  
Grassi F, Malik Tyagi A, Calvert JW, Gambari L, Walker LD, Yu M, Robinson J, Li JY, Lisignoli G, Vaccaro C, Adams J, Pacifici R. J Bone Miner Res. 2015 Nov 28.

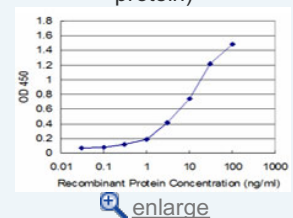
### Application Image

Western Blot (Cell lysate)



Western Blot (Recombinant protein)

Sandwich ELISA (Recombinant protein)

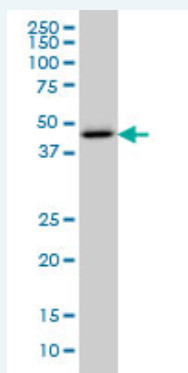


ELISA

2. Sex-specific dysregulation of cysteine oxidation and the methionine and folate cycles in female cystathionine gamma-lyase null mice: a serendipitous model of the methylfolate trap.  
 Jiang H, Hurt KJ, Breen K, Stabler SP, Allen RH, Orlicky DJ, Maclean KN. *Biol Open*. 2015 Aug 14;4(9):1154-62.
3. The integrated stress response modulates cellular redox state via induction of cystathionine gamma-lyase: cross-talk between the integrated stress response and thiol metabolism.  
 Dickhout JG, Carlisle RE, Jerome DE, Mohammed-Ali Z, Jiang H, Yang G, Mani S, Garg SK, Banerjee R, Kaufman RJ, Maclean KN, Wang R, Austin RC. *J Biol Chem*. 2012 Jan 3. [Epub ahead of print]
4. A novel transgenic mouse model of CBS deficient homocystinuria does not incur hepatic steatosis or fibrosis and exhibits a hypercoagulative phenotype that is ameliorated by betaine treatment.  
 Maclean KN, Sikora J, Kozich V, Jiang H, Greiner LS, Kraus E, Krijt J, Overdier KH, Collard R, Brodsky GL, Meltesen L, Crnic LS, Allen RH, Stabler SP, Elleder M, Rozen R, Patterson D, Kraus JP. *Mol Genet Metab*. 2010 Jun 23. [Epub ahead of print]
5. Hydrogen sulfide as a mediator of human corpus cavernosum smooth-muscle relaxation.  
 dEmmanuele di Villa Bianca R, Sorrentino R, Maffia P, Mirone V, Imbimbo C, Fusco F, De Palma R, Ignarro LJ, Cirino G. *Proc Natl Acad Sci U S A*. 2009 Mar 17;106(11):4513-8. Epub 2009 Mar 2.

## Applications

### Western Blot (Cell lysate)



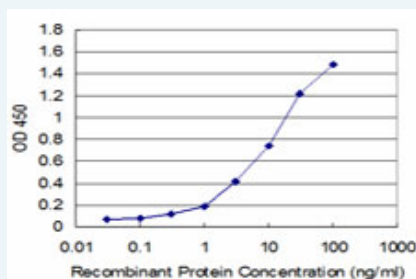
CTH monoclonal antibody (M02), clone 2E12-1C10 Western Blot analysis of CTH expression in K-562 ( Cat # L009V1 ).

 [Protocol Download](#)


### Western Blot (Recombinant protein)

 [Protocol Download](#)

### Sandwich ELISA (Recombinant protein)



Detection limit for recombinant GST tagged CTH is approximately 1ng/ml as a capture antibody.

 [Protocol Download](#)

## ELISA

## Gene Information

Entrez GeneID: [1491](#)

**GeneBank Accession#:** [BC015807](#)

**Protein Accession#:** [AAH15807](#)

**Gene Name:** CTH

**Gene Alias:** MGC9471

**Gene Description:** cystathionase (cystathionine gamma-lyase)

**Omim ID:** [219500](#), [607657](#)

**Gene Ontology:** [Hyperlink](#)

**Gene Summary:** This gene encodes a cytoplasmic enzyme in the trans-sulfuration pathway that converts cystathione derived from methionine into cysteine. Glutathione synthesis in the liver is dependent upon the availability of cysteine. Mutations in this gene cause cystathioninuria. Alternative splicing of this gene results in two transcript variants encoding different isoforms. [provided by RefSeq]

**Other Designations:** OTTHUMP00000010945, OTTHUMP00000010946, cystathionase, cysteine desulfhydrase, gamma-cystathionase, homoserine deaminase, homoserine dehydratase

#### Gene Pathway

[Cysteine and methionine metabolism](#) [Glycine, serine and threonine metabolism](#)  
[Metabolic pathways](#) [Nitrogen metabolism](#) [Selenoamino acid metabolism](#)

#### Related Disease

[Atherosclerosis](#) [Atherosclerosis](#) [Calcinosis](#) [Cardiovascular Diseases](#) [Carotid Stenosis](#)  
[Cleft Lip](#) [Cleft Palate](#) [Coronary Artery Disease](#) [Diabetes Mellitus, Type 2](#) [Edema](#)  
[Genetic Predisposition to Disease](#) [Hypertension](#) [Infertility, Female](#) [Lung Neoplasms](#)  
[Pulmonary Disease, Chronic Obstructive](#) [Spinal Dysraphism](#) [Urinary Bladder Neoplasms](#)  
[Werner syndrome](#)