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CTH Antibody (monoclonal) (M03)

Mouse monoclonal antibody raised against a full length recombinant CTH.
Catalog # AT1668a

Product Information

Application	WB, IHC, E
Primary Accession	P32929
Other Accession	BC015807
Reactivity	Human, Mouse
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	S51
Calculated MW	44508

Additional Information

Gene ID	1491
Other Names	Cystathionine gamma-lyase, Cysteine-protein sulfhydrase, Gamma-cystathionase, CTH
Target/Specificity	CTH (AAH15807, 1 a.a. ~ 405 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	CTH Antibody (monoclonal) (M03) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

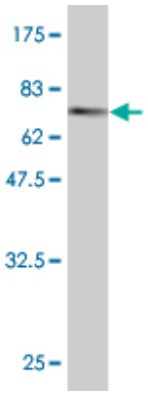
This gene encodes a cytoplasmic enzyme in the trans-sulfuration pathway that converts cystathione derived from methionine into cysteine. Glutathione synthesis in the liver is dependent upon the availability of cysteine. Mutations in this gene cause cystathioninuria. Alternative splicing of this gene results in three transcript variants encoding different isoforms.

References

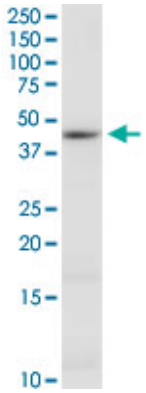
1.cGMP-Dependent Protein Kinase Contributes to Hydrogen Sulfide-Stimulated Vasorelaxation.Bucci M, Papapetropoulos A, Vellecco V, Zhou Z, Zaid A, Giannogonas P, Cantalupo A, Dhayade S, Karalis KP, Wang R,

Feil R, Cirino G.PLoS One. 2012;7(12):e53319. doi: 10.1371/journal.pone.0053319. Epub 2012 Dec 28.2.Hydrogen sulfide impairs glucose utilization and increases gluconeogenesis in hepatocytes.Zhang L, Yang G, Untereiner A, Ju Y, Wu L, Wang R.Endocrinology. 2013 Jan;154(1):114-26. doi: 10.1210/en.2012-1658. Epub 2012 Nov 26.3.An investigation of the mechanisms of hydrogen sulfide-induced vasorelaxation in rat middle cerebral arteries.Streeter E, Hart J, Badoer E.Naunyn Schmiedebergs Arch Pharmacol. 2012 Jul 17.4.Characterization of Hydrogen Sulfide and Its Synthases, Cystathionine ?]-Synthase and Cystathionine ?^-Lyase, in Human Prostatic Tissue and Cells.Guo H, Gai JW, Wang Y, Jin HF, Du JB, Jin J.Urology. 2012 Feb;79(2):483.e1-5.5.Glucocorticoids suppress cystathionine gamma-lyase expression and H(2)S production in lipopolysaccharide-treated macrophages.Zhu XY, Liu SJ, Liu YJ, Wang S, Ni X.Cell Mol Life Sci. 2010 Jan 10. [Epub ahead of print]6.H2S contributes to the hepatic arterial buffer response and mediates vasorelaxation of the hepatic artery via activation of KATP channels.Siebert N, Cantre D, Eipel C, Vollmar B.Am J Physiol Gastrointest Liver Physiol. 2008 Dec;295(6):G1266-73. Epub 2008 Oct 30.

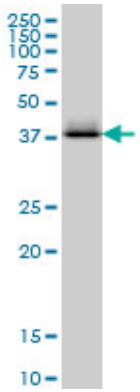
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (70.07 KDa) .



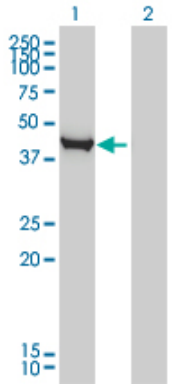
CTH monoclonal antibody (M03), clone S51. Western Blot analysis of CTH expression in mouse kidney.



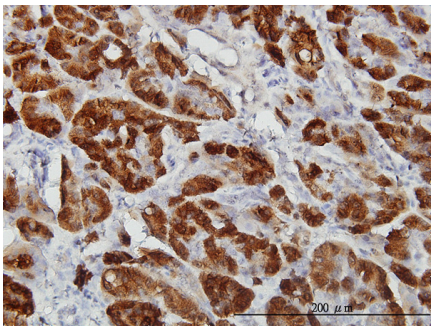
CTH monoclonal antibody (M03), clone S51 Western Blot analysis of CTH expression in K-562 ((Cat # AT1668a)

Western Blot analysis of CTH expression in transfected 293T cell line by CTH monoclonal antibody (M03), clone S51.

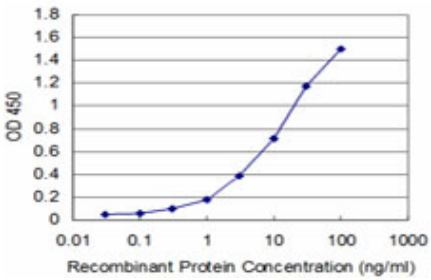
Lane 1: CTH transfected lysate(45 KDa).



Lane 2: Non-transfected lysate.



Immunoperoxidase of monoclonal antibody to CTH on formalin-fixed paraffin-embedded human pancreas. [antibody concentration 3 ug/ml]



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.