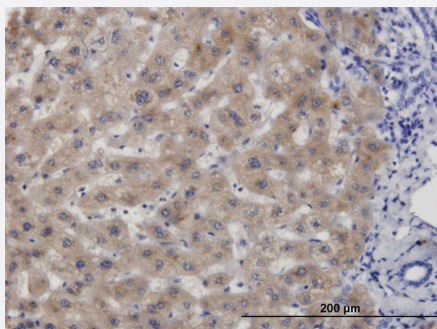


CBS monoclonal antibody (M06), clone 6A9

Catalog # H00000875-M06

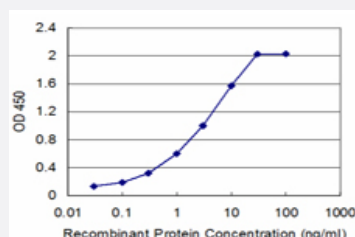
Size 100 ug

Applications



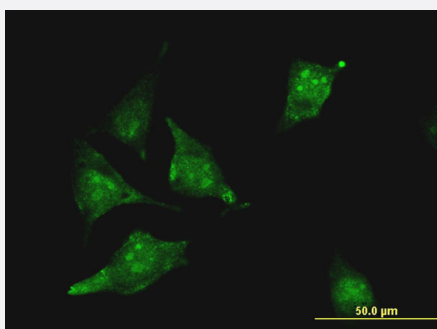
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

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



Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged CBS is approximately 0.03ng/ml as a capture antibody.



Immunofluorescence

Immunofluorescence of monoclonal antibody to CBS on HeLa cell . [antibody concentration 20 ug/ml]



Western Blot detection against Immunogen (36.74 KDa) .

Specification

Product Description	Mouse monoclonal antibody raised against a partial recombinant CBS.
Immunogen	CBS (NP_000062, 1 a.a. ~ 100 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	MPSETPQAEVGPTGCPHRSGPHSAKGSLEKGSPEDKEAKEPLWIRPDAPSRCTWQLGRPASE SPHHHTAPAKSPKILPDILKKIGDTPMVRINKIGKKFG
Host	Mouse
Reactivity	Human
Interspecies Antigen Sequence	Mouse (61); Rat (63)
Isotype	IgG1 Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.74 KDa) .
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Recombinant protein)

[Protocol Download](#)

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

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

[Protocol Download](#)

- Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged CBS is approximately 0.03ng/ml as a capture antibody.

[Protocol Download](#)

- ELISA

- Immunofluorescence

Immunofluorescence of monoclonal antibody to CBS on HeLa cell . [antibody concentration 20 ug/ml]

Gene Info — CBS

Entrez GeneID

[875](#)

GeneBank Accession#

[NM_000071](#)

Protein Accession#

[NP_000062](#)

Gene Name

CBS

Gene Alias

HIP4

Gene Description

cystathionine-beta-synthase

Omim ID

[236200](#)

Gene Ontology

[Hyperlink](#)

Gene Summary

The protein encoded by this gene acts as a homotetramer to catalyze the conversion of homocystine to cystathionine, the first step in the transsulfuration pathway. The encoded protein is allosterically activated by adenosyl-methionine and uses pyridoxal phosphate as a cofactor. Defects in this gene can cause cystathionine beta-synthase deficiency (CBS), which can lead to homocystinuria. [provided by RefSeq]

Other Designations

OTTHUMP00000109416|OTTHUMP00000109418|beta-thionase|cystathionine beta-synthase|methionine synthase|serine sulfhydrase

Publication Reference

- [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.

Biology Open 2015 Aug; 4(9):1154.

Application: WB, Mouse, Liver

- [Purification and characterization of cystathionine \$\gamma\$ -synthase bearing a cobalt protoporphyrin.](#)

Majtan T, Freeman KM, Smith AT, Burstyn JN, Kraus JP.

Archives of Biochemistry and Biophysics 2011 Apr; 508(1):25.

Application: WB, E. coli, Recombinant protein

Pathway

- [Cysteine and methionine metabolism](#)
- [Glycine](#)
- [Metabolic pathways](#)
- [Selenoamino acid metabolism](#)

Disease

- [Abnormalities](#)
- [Adenocarcinoma](#)
- [Alzheimer disease](#)
- [Aortic Aneurysm](#)
- [Arterial Occlusive Diseases](#)
- [Arteriosclerosis](#)
- [Atherosclerosis](#)
- [Attention](#)
- [Brain Infarction](#)

- [Brain Ischemia](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Calcinosis](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Carotid Artery](#)
- [Cerebral Palsy](#)
- [Cerebrovascular Accident](#)
- [Cerebrovascular Disorders](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Cognition](#)
- [Cognition Disorders](#)
- [Colorectal Neoplasms](#)
- [Connective Tissue Diseases](#)
- [Constriction](#)
- [Coronary Artery Disease](#)
- [Coronary Disease](#)
- [Coronary Stenosis](#)
- [Data Display](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Down Syndrome](#)
- [Edema](#)

- [Esophageal Neoplasms](#)
- [Exfoliation Syndrome](#)
- [Fetal Diseases](#)
- [Gastrointestinal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Glaucoma](#)
- [Heart Defects](#)
- [Heart Diseases](#)
- [Heart Septal Defects](#)
- [Homocystinuria](#)
- [Huntington disease](#)
- [Hyperhomocysteinemia](#)
- [Hypertension](#)
- [Infection](#)
- [Inflammation](#)
- [Intelligence Tests](#)
- [Intracranial Aneurysm](#)
- [Intracranial Thrombosis](#)
- [Kidney Failure](#)
- [Leukemia](#)
- [Liver Cirrhosis](#)
- [Lung Neoplasms](#)
- [Lupus Erythematosus](#)
- [Lymphoma](#)
- [Malnutrition](#)
- [Meningioma](#)

- [Mental Retardation](#)
- [Mental Status Schedule](#)
- [Metabolic Diseases](#)
- [Metabolic Syndrome X](#)
- [Microsatellite Instability](#)
- [Migraine Disorders](#)
- [Musculoskeletal Diseases](#)
- [Myocardial Infarction](#)
- [Myocardial Ischemia](#)
- [Neoplasms](#)
- [Neural Tube Defects](#)
- [Neuropsychological Tests](#)
- [Obesity](#)
- [Osteoporosis](#)
- [Parkinson disease](#)
- [Pregnancy Complications](#)
- [Premature Birth](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Psychotic Disorders](#)
- [Pulmonary Disease](#)
- [Recurrence](#)
- [Schizophrenia](#)
- [Schizophrenic Psychology](#)
- [Skin Diseases](#)
- [Spinal Dysraphism](#)

- [Stomach Neoplasms](#)
- [Stroke](#)
- [Tobacco Use Disorder](#)
- [Urinary Bladder Neoplasms](#)
- [Vascular Diseases](#)
- [Venous Thrombosis](#)
- [Vertebral Artery Dissection](#)
- [Werner syndrome](#)