

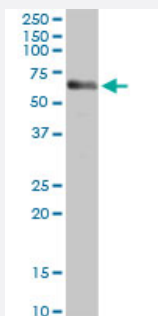
MaxPab®

CBS purified MaxPab rabbit polyclonal antibody (D01P)

Catalog # H00000875-D01P

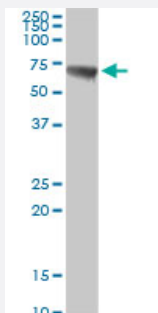
Size 100 ug

Applications



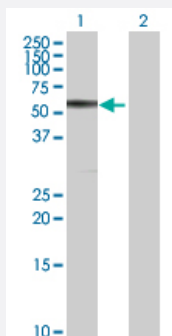
Western Blot (Tissue lysate)

CBS MaxPab rabbit polyclonal antibody. Western Blot analysis of CBS expression in human pancreas.



Western Blot (Tissue lysate)

CBS MaxPab rabbit polyclonal antibody. Western Blot analysis of CBS expression in mouse kidney.



Western Blot (Transfected lysate)

Western Blot analysis of CBS expression in transfected 293T cell line ([H00000875-T01](#)) by CBS MaxPab polyclonal antibody.

Lane 1: CBS transfected lysate(60.60 KDa).

Lane 2: Non-transfected lysate.

Specification

Product Description

Rabbit polyclonal antibody raised against a full-length human CBS protein.

Immunogen	CBS (NP_000062.1, 1 a.a. ~ 551 a.a) full-length human protein.
Sequence	MPSETPQAEVGPTGCPHRSGPHSAKGSLEKGSPEDKEAKEPLWIRPDAPSRCTWQLGRPASE SPHHHTAPAKSPKILPDILKKIGDTPMVRINKIGKKFGLKCELLAKCEFFNAGGSVKDRISLRMIEDA ERDGTLPKPGDTTIEPTSGNTGIGLALAAAVRGYRCIIVMPEKMSSEKVDVLRALGAENVRTPTNARFD SPESHVGVAVWRLKNEIPNSHILDQYRNASNPLAHYDTTADEILQQCDGKLDMLVASVGTGGTITGIA RKLKEKCPGCRIGVDPEGSILAEPEELNQTEQTTYEVEGIGYDFIPTVLDRTVVDKWFKSNDEEAF TFARMLIAQEGLLCGGSAGSTVAVAVKAAQELQEGQRCVVILPDSVRNYMTKFLSDRWMLQKGF LKEEDLTEKKPWWWHLRVQELGLSAPLTVLPITTCGHTIEILREKGFDAQPVVDEAGVILGMVTLG NMLSSLLAGKVQPSDQVGKVIYKQFKQIRLTDTLGRLSHILEMDHFALVVHEQIQYHSTGKSSQRQ MVFGVVTAIDLLNFVAAQERDQK
Host	Rabbit
Reactivity	Human, Mouse
Interspecies Antigen Sequence	Mouse (84); Rat (84)
Quality Control Testing	Antibody reactive against mammalian transfected lysate.
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 (Tissue lysate)

CBS MaxPab rabbit polyclonal antibody. Western Blot analysis of CBS expression in human pancreas.

[Protocol Download](#)

- Western Blot (Tissue lysate)

CBS MaxPab rabbit polyclonal antibody. Western Blot analysis of CBS expression in mouse kidney.

[Protocol Download](#)

- Western Blot (Transfected lysate)

Western Blot analysis of CBS expression in transfected 293T cell line ([H00000875-T01](#)) by CBS MaxPab polyclonal antibody.

Lane 1: CBS transfected lysate(60.60 KDa).

Lane 2: Non-transfected lysate.

[Protocol Download](#)

Gene Info — CBS

Entrez GeneID	875
GeneBank Accession#	NM_000071.1
Protein Accession#	NP_000062.1
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 methylcysteine synthase serine sulfhydrase

Publication Reference

- [H2S stimulated bioenergetics in chicken erythrocytes and the underlying mechanism.](#)

Zhuping Jin, Quanxi Zhang, Eden Wondimu, Richa Verma, Ming Fu, Tian Shuang, Hassan Mustafa Arif, Lingyun Wu, Rui Wang.
American Journal of Physiology. Regulatory, Integrative and Comparative Physiology 2020 Jul; 319(1):R69.

Application: WB-Ce, WB-Ti, Chicken, Mouse, Chicken erythrocytes, Mouse livers

- [Discovery of a redox thiol switch: implications for cellular energy metabolism.](#)

Gao X, Li L, Parisien M, Wu J, Bederman I, Gao Z, Krokowski D, Chirieleison SM, Abbott DW, Wang B, Arvan P, Cameron M, Chance M, Willard BB, Hatzoglou M.

Molecular & Cellular proteomics: MCP 2020 May; 19(5):852.

Application: WB-Ce, Human, Human immortalized human hepatocytes, Human pancreatic beta cells

- [Coronary artery hypoxic vasorelaxation is augmented by perivascular adipose tissue through a mechanism involving hydrogen sulfide and cystathionine- \$\beta\$ -synthase.](#)

Donovan J, Wong PS, Garle MJ, Alexander SPH, Dunn WR, Ralevic V.

Acta Physiologica (Oxford, England) 2018 Jun; e13126.

Application: WB-Ti, Pig, Coronary artery, Myocardium, Perivascular adipose tissue

- [Prenatal maternal stress induces visceral hypersensitivity of adult rat offspring through activation of cystathionine- \$\beta\$ -synthase signaling in primary sensory neurons.](#)

Wang HJ, Xu X, Xie RH, Rui YY, Zhang PA, Zhu XJ, Xu GY.

Molecular Pain 2018 Jan; 14:1744806918.

Application: WB, Rat, Dorsal root ganglion

- [The viability of primary hepatocytes is maintained under a low cysteine-glutathione redox state with a marked elevation in ophthalmic acid production.](#)

Lee J, Sil Kang E, Kobayashi S, Homma T, Sato H, Geuk Seo H, Fujii J.

Experimental Cell Research 2017 Dec; 361(1):178.

Application: WB-Ce, Mouse, Mouse primary hepatocytes

- [Increased ophthalmic acid production is supported by amino acid catabolism under fasting conditions in mice.](#)

Kobayashi S, Lee J, Takao T, Fujii J.

Biochemical and Biophysical Research Communications 2017 Jul; 491(3):649.

Application: WB-Ti, Mouse, Mouse liver

- [Hydrogen sulfide protects against the development of experimental cerebral malaria in a C57BL/6 mouse model.](#)

Jiang P, Xu Z, Xiao B, Han Z, Huang J, Xu J, Lun Z, Zhou W.

Molecular Medicine Reports 2017 Jun; 16(2):2045.

Application: WB-Ti, Mouse, Mouse brain

- [Ascorbic acid prevents acetaminophen-induced hepatotoxicity in mice by ameliorating glutathione recovery and autophagy.](#)

Kurahashi T, Lee J, Nabeshima A, Homma T, Kang ES, Saito Y, Yamada S, Nakayama T, Yamada KI, Miyata S, Fujii J.

Archives of Biochemistry and Biophysics 2016 Aug; 604:36.

Application: WB-Ti, Mouse, Liver

- [Selectivity of commonly used pharmacological inhibitors for cystathionine beta synthase \(CBS\) and cystathionine gamma lyase \(CSE\).](#)

Asimakopoulou A, Panopoulos P, Chasapis CT, Coletta C, Zhou Z, Cirino G, Giannis A, Szabo C, Spyroulias GA, Papapetropoulos A.

British Journal of Pharmacology 2013 Jun; 169(4):922.

Application: WB-Ti, Rat, Aorta, Brain

- [Promoter demethylation of cystathionine- \$\beta\$ -synthetase gene contributes to inflammatory pain in rats.](#)

Qi F, Zhou Y, Xiao Y, Tao J, Gu J, Jiang X, Xu GY.

Pain 2012 Dec; 154(1):34.

Application: WB, Rat, dorsal root ganglia (DRG) neurons

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](#)