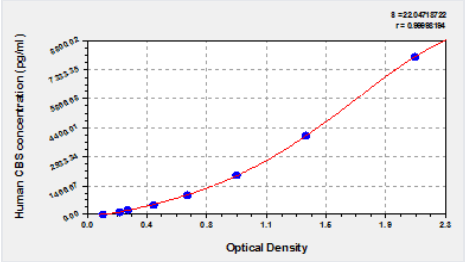
Cystathionine-Beta-Synthase (CBS) ELISA Kit for Human

PRODUCT OVERVIEW

Product Name	cystathionine-beta-synthase (CBS), ELISA Kit
Full Product Name	Human cystathionine beta-synthase, CBS ELISA Kit
Product Gene Name	CBS elisa kit
Product Synonym Names	Human cystathionine beta-synthase (CBS) ELISA Kit; HIP4; OTTHUMP00000109415; OTTHUMP00000109416; OTTHUMP00000109418; beta-thionase; cystathionine beta-synthase; methylcysteine synthase; serine sulfhydrase; cystathionine-beta-synthase
Species Reactivity	Human
Assay Type	Quantitative Sandwich
Samples	Serum, plasma, tissue homogenates, cell lysates
Detection Range	125 pg/ml-8000 pg/ml
Sensitivity	< 31.25 pg/ml
Specificity	This assay has high sensitivity and excellent specificity for detection of human CBS. No significant cross-reactivity or interference between human CBS and analogues was observed.
Preparation and Storage	Unopened test kits should be stored at 2 to 8 degree C upon receipt. Please refer to pdf manual for further storage instructions.
Inter-assay Precision	Inter-assay Precision (Precision between assays): CV%<10%. Three samples of known concentration were tested in twenty assays to assess.
Intra-assay Precision	Intra-assay Precision (Precision within an assay): CV%<8%. Three samples of known concentration were tested twenty times on one plate to assess.
Molecular Weight	60,587 Da
OMIM	613381
3D Structure	ModBase 3D Structure for P35520
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Related Product Information for CBS elisa kit	Principle of the Assay: This assay employs the quantitative sandwich enzyme immunoassay technique. Antibody specific for CBS has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any CBS present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for CBS is added to the wells. After washing, avidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of CBS bound in the initial step. The color development is stopped and the intensity of the color is measured.
Other Notes	Small volumes of CBS elisa kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for CBS purchase	MBS700623 is a ready-to-use microwell, strip plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the cystathionine-beta-synthase (CBS) ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing CBS. The ELISA analytical biochemical technique of the MBS700623 kit is based on CBS antibody-CBS antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect CBS antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, CBS. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).



Typical Testing Data/Standard Curve (for reference only) of CBS elisa kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CBS. It may not necessarily be applicable to this product.

NCBI GI #	4557415
NCBI GeneID	875
NCBI Accession #	NP_000062.1
UniProt Primary Accession #	P35520
UniProt Secondary Accession #	Q99425; Q9BWC5; B2R993; D3DSK4
UniProt Related Accession #	P35520
GenBank Nucleotide #	NM_000071.2
NCBI Official Full Name	cystathionine beta-synthase
NCBI Official Synonym Full Names	cystathionine-beta-synthase
NCBI Official Symbol	CBS
NCBI Official Synonym Symbols	HIP4
UniProt Protein Name	Cystathionine beta-synthase
UniProt Synonym Protein Names	Beta-thionase; Serine sulfhydrase
Protein Family	Cystathionine beta-synthase
UniProt Gene Name	CBS
UniProt Entry Name	CBS_HUMAN
NCBI Protein Information	cystathionine beta-synthase; beta-thionase; serine sulfhydrase; methylcysteine synthase
NCBI Summary for CBS	The protein encoded by this gene acts as a homotetramer to catalyze the conversion of homocysteine 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 (CBSD), which can lead to homocystinuria. Multiple alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, May 2010]
UniProt Comments for CBS	**Function:** Only known pyridoxal phosphate-dependent enzyme that contains heme. Important regulator of hydrogen sulfide, especially in the brain, utilizing cysteine instead of serine to catalyze the formation of hydrogen sulfide. Hydrogen sulfide is a gastratransmitter with signaling and cytoprotective effects such as acting as a neuromodulator in the brain to protect neurons against hypoxic injury **Catalytic activity:** L-serine + L-homocysteine = L-cystathionine + H2O. **Cofactor:** Pyridoxal phosphate. **Enzyme regulation:** Allosterically activated by adenosyl-methionine (AdoMet).
Research Articles on CBS	**1.** Cystathionine beta-synthase (CBS) contributes to advanced ovarian cancer progression and drug resistance.

Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/cbs-human-elisa-kits/cystathionine-beta-synthase/700623