

**Cystathionine  $\beta$ -Synthase Antibody**  
**Rabbit Polyclonal Antibody**  
**Catalog # ABV11806****Specification**

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**Cystathionine  $\beta$ -Synthase Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P35520</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	60587

**Cystathionine  $\beta$ -Synthase Antibody - Additional Information****Gene ID** 102724560;875

Positive Control	WB: Hela cell lysates, rh-CBS
Application & Usage	WB: 1-4 $\mu$ g
Alias Symbol	CBS
<b>Other Names</b>	
Beta-thionase, Serine sulfhydrase, Cystathionine beta-synthase	

**Appearance**  
Colorless liquid**Formulation**  
In PBS pH 7.2, 0.01 % BSA, 0.03 % ProClin® and 50 % glycerol**Reconstitution & Storage**  
-20 °C**Background Descriptions****Precautions**

Cystathionine  $\beta$ -Synthase Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Cystathionine  $\beta$ -Synthase Antibody - Protein Information****Name** CBS**Function**

Hydro-lyase catalyzing the first step of the transsulfuration pathway, where the hydroxyl group of L-serine is displaced by L-homocysteine in a beta-replacement reaction to form L-cystathionine, the precursor of L-cysteine. This catabolic route allows the elimination of L-methionine and the

toxic metabolite L-homocysteine (PubMed:<a href="http://www.uniprot.org/citations/23981774" target="\_blank">23981774</a>, PubMed:<a href="http://www.uniprot.org/citations/20506325" target="\_blank">20506325</a>, PubMed:<a href="http://www.uniprot.org/citations/23974653" target="\_blank">23974653</a>). Also involved in the production of hydrogen sulfide, a gasotransmitter with signaling and cytoprotective effects on neurons (By similarity).

#### Cellular Location

Cytoplasm. Nucleus

#### Tissue Location

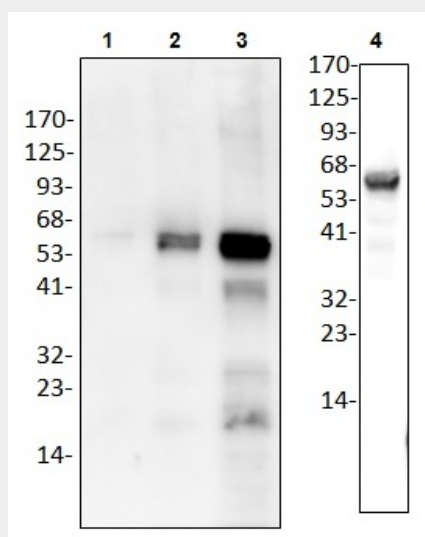
In the adult strongly expressed in liver and pancreas, some expression in heart and brain, weak expression in lung and kidney. In the fetus, expressed in brain, liver and kidney

### Cystathionine $\beta$ -Synthase Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Cystathionine $\beta$ -Synthase Antibody - Images



Western blot analysis of CBS using anti-CBS antibody: Lane1-3(2ng, 10ng, 50ng); Lane4(Hela cell lysate)

### Cystathionine $\beta$ -Synthase Antibody - Background

Cystathionine  $\beta$ -synthase (CBS; E.C. 4.2.1.22) is a PLP-dependent enzyme which plays a central role in sulfur amino acid metabolism in eukaryotes. CBS catalyzes condensation between serine and homocysteine to generate cystathionine, which is then further processed by cystathionine  $\gamma$ -lyase to yield cysteine. The gene encoding CBS is essentially linked to the genetic disorders of

homocystinuria and Down syndrome. Homocystinuria is an autosomal recessive disease, characterized by high plasma levels of homocysteine, with clinical manifestations including mental retardation, thromboembolism and connective tissue defects. In addition, CBS also mediates synthesis of hydrogen sulfide by catalyzing condensation between cysteine and homocysteine. CBS is highly expressed in the nervous system, liver and kidney and is responsible for up to 95% of the H<sub>2</sub>S production in the brain.