

Anti-CBS Antibody
Catalog # ABO10860**Specification**

Anti-CBS Antibody - Product Information

Application	WB, IHC
Primary Accession	P35520
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Cystathionine beta-synthase(CBS) detection. Tested with WB, IHC-P in Human.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-CBS Antibody - Additional Information

Gene ID 102724560;875

Other Names

Cystathionine beta-synthase, 4.2.1.22, Beta-thionase, Serine sulfhydrase, CBS

Calculated MW

60587 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat
Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization

Cytoplasm . Nucleus .

Tissue Specificity

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.

Protein Name

Cystathionine beta-synthase

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of human CBS(322-342aa KWFKSNDEEAFTFARMLIAQE).

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the cysteine synthase/cystathionine beta- synthase family.

Anti-CBS 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:23981774, PubMed:20506325, PubMed:23974653). Also involved in the production of hydrogen sulfide, a gasotransmitter with signaling and cytoprotective effects on neurons (By similarity).

Cellular Location

Cytoplasm. Nucleus

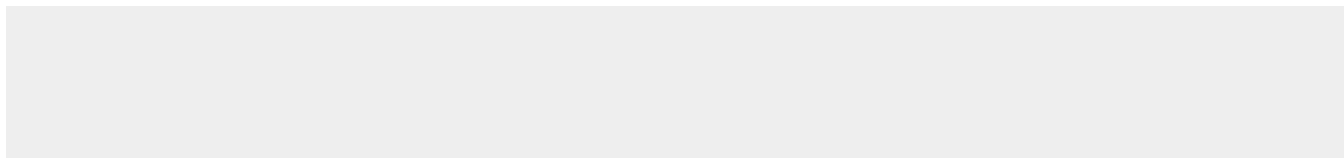
Tissue Location

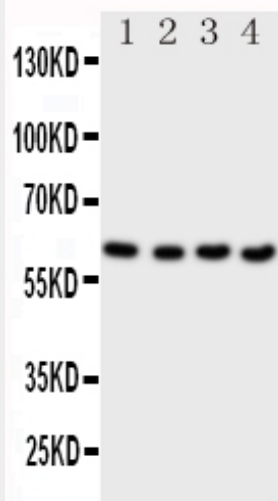
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Anti-CBS Antibody - Protocols

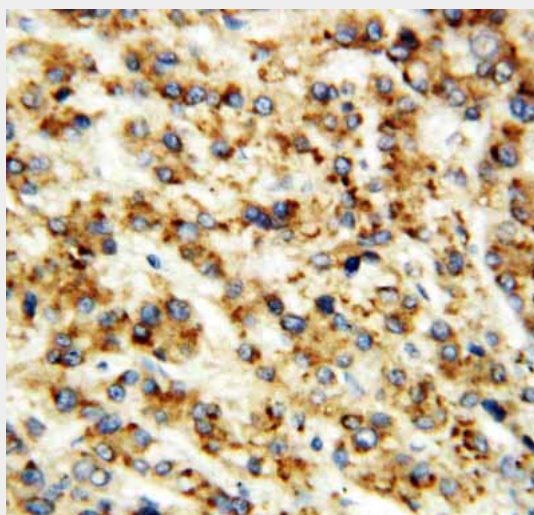
Provided below are standard protocols that you may find useful for product applications.

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

Anti-CBS Antibody - Images



Anti-CBS antibody, ABO10860, Western blotting
Lane 1: SMMC Cell Lysate
Lane 2: U87 Cell Lysate
Lane 3: HELA Cell Lysate
Lane 4: MM231 Cell Lysate



Anti-CBS antibody, ABO10860, IHC(P)
IHC(P): Human Liver Cancer Tissue

Anti-CBS Antibody - Background

CBS, Cystathionine Beta-Synthase, catalyzes the first irreversible step of transsulfuration. The CBS enzyme is a homotetramer of 63-kD subunits and requires pyridoxal phosphate and heme for activity. The CBS gene, which is mapped to chromosome 21q22, contains 23 exons, ranging in size from 42 to 299 bp. The human CBS protein can substitute for the endogenous yeast CBS protein in *Saccharomyces cerevisiae*. The catalytic domain of the CBS protein is located in the N-terminal 409 amino acids, and a regulatory domain is located in the C-terminal 142 amino acids. A mutation that deletes the C-terminal 145 amino acids of CBS could restore activity of several CBS mutant alleles found in homocystinurics.