

CBS Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP6959a**Specification**

CBS Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [P35520](#)**CBS Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 102724560;875**Other Names**

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

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP6959a](/products/AP6959a) was selected from the N-term region of human CBS. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

CBS Antibody (N-term) Blocking Peptide - 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](http://www.uniprot.org/citations/23981774), PubMed: [20506325](http://www.uniprot.org/citations/20506325), PubMed: [23974653](http://www.uniprot.org/citations/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

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

CBS Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

CBS Antibody (N-term) Blocking Peptide - Images**CBS Antibody (N-term) Blocking Peptide - Background**

CBS acts as a homotetramer to catalyze the conversion of homocysteine to cystathionine, the first step in the transsulfuration pathway. This 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.

CBS Antibody (N-term) Blocking Peptide - References

Ravel,C., et.al., PLoS ONE 4 (8), E6540 (2009)