

CBS Antibody (Center)

Rabbit Polyclonal Antibody Catalog # ABV11278

Specification

CBS Antibody (Center) - Product Information

Application WB, IHC, IF, FC
Primary Accession
Reactivity Human, Rat
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 60587

CBS Antibody (Center) - Additional Information

Gene ID 102724560;875

Positive Control Western blot: Raji, Rat brain and

cerebellum tissue lysate, IHC: human brain

tissue, FACS: 293 cells, IF: 293 cells Western blot: ~1:1000, IHC: ~1:10-1:50,

IF: ~1:10-1:50, FACS: ~1:10-1:50.

Other Names

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

Target/Specificity

Application & Usage

CBS

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

100 µl of antibody in PBS with 0.09% (W/V) sodium azide

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions

Precautions

CBS Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.



CBS Antibody (Center) - 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:20506325, PubMed:23974653, PubMed:23981774). 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 (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- <u>Cell Culture</u>

CBS Antibody (Center) - Images

CBS Antibody (Center) - Background

Strongly expressed in human liver and pancreas, with weaker expression in heart and brain, the cytoplasmic protein cystathionine b-synthase (CBS) operates in the first step of homocysteine transulfuration. CBS, which belongs to the cysteine synthase/cystathionine b-synthase family of proteins, catalyzes the formation of cystathionine from the thrombogenic amino acid homocysteine using pyridoxal phosphate cofactor. Allosteric activation by adenosyl-methionine regulates CBS activity. Deficiencies in CBS are associated with homocystinuria, a recessively inherited error in sulfur amino acid metabolism that affects many organs and tissues. Symptoms of homocytinuria include arteriosclerosis, thrombosis, dislocated optic lenses, mental retardation and skeletal abnormalities.