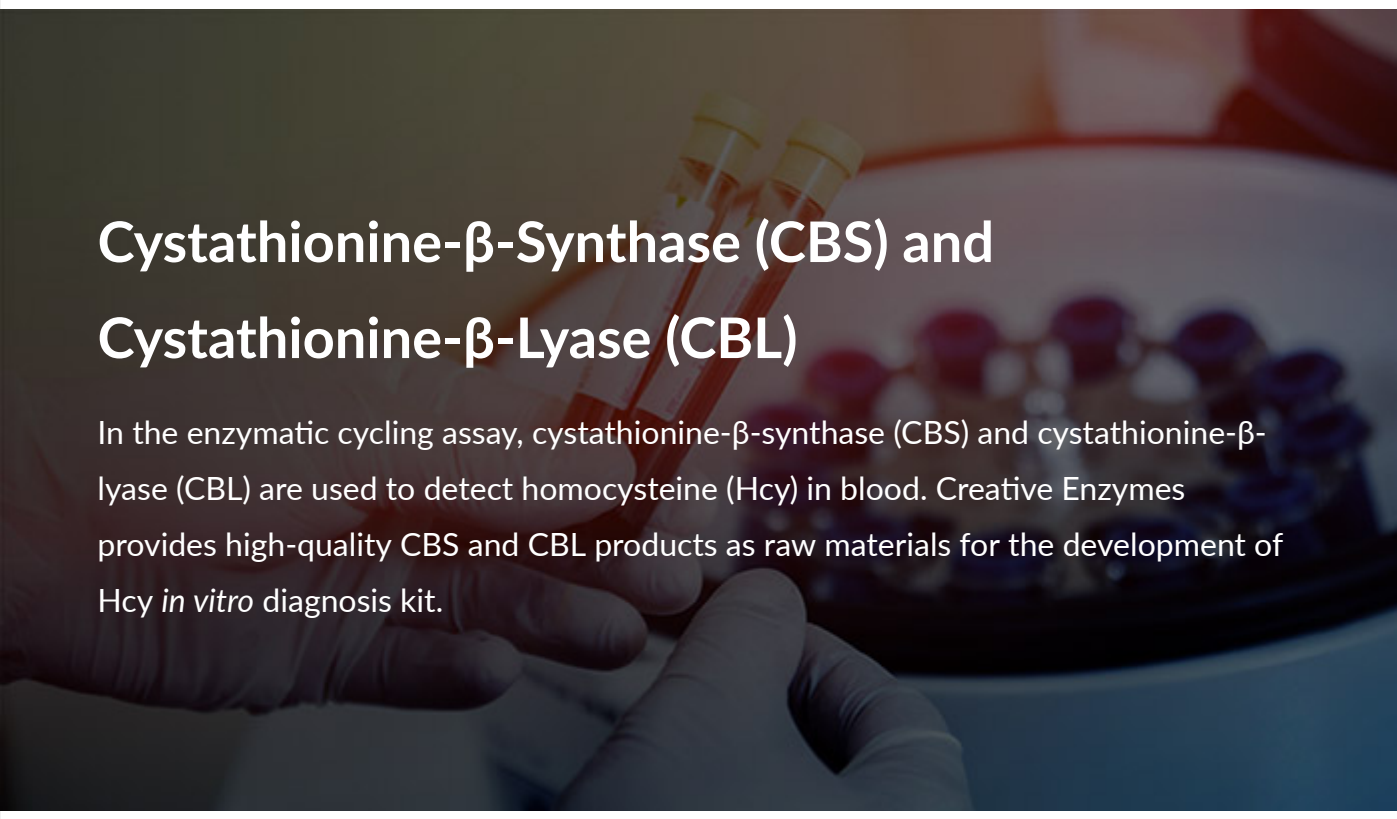

Cystathionine-β-Synthase (CBS) and Cystathionine-β-Lyase (CBL)

In the enzymatic cycling assay, cystathionine-β-synthase (CBS) and cystathionine-β-lyase (CBL) are used to detect homocysteine (Hcy) in blood. Creative Enzymes provides high-quality CBS and CBL products as raw materials for the development of Hcy *in vitro* diagnosis kit.

Cystathionine-β-Synthase, Recombinant

Description

CBS (EC 4.2.1.22) is a multidomain enzyme composed of an N-terminal enzymatic domain and two CBS domains. It catalyzes the first step of the transsulfuration pathway, from homocysteine to cystathionine. CBS uses the cofactor pyridoxal-phosphate (PLP) and can be allosterically regulated by effectors such as the ubiquitous cofactor S-adenosyl-L-methionine (adoMet). This enzyme belongs to the family of lyases, to be specific, the hydro-lyases, which cleave carbon-oxygen bonds.

Product Information

Cat No. DIA-293	**Molecular Weight:** 56 KDa
EC No. EC 4.2.1.22	**Appearance:** Lyophilized powder
Purity: >90% (by SDS-PAGE)	**pH Stability:** 7.4-8.5
Activity: 150 U/mg	**Buffer:** PBS, pH7.4

Cystathionine-β-Lyase, Recombinant

Description

CBL (EC 4.4.1.8) primarily catalyzes the following chemical reaction: L-cystathionine + H2O ↔ L-homocysteine + NH3 + pyruvate. It is an essential part of the methionine biosynthesis pathway as homocysteine can be directly converted into methionine by methionine synthase. The enzyme belongs to the γ-family of PLP-dependent enzymes due to its use of a pyridoxal-5'-phosphate (PLP) cofactor to cleave cystathionine. The enzyme also belongs to the family of lyases, specifically the class of carbon-sulfur lyases.

Product Information	
Cat No. NATE-1146	**Molecular Weight:** 56 KDa
EC No. EC 4.4.1.8	**Appearance:** Lyophilized powder or liquid
Purity: >90% (by SDS-PAGE)	**pH Stability:** 7.0-9.0
Activity: Liquid form, 120 U/mg; powder form, 500U/mg	**Buffer:** PBS, pH7.4

Except for the above-mentioned enzymes, Creative Enzymes also provides other CBS and CBL products for both research and industrial use.

Creative Enzymes®

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