Creative Enzymes®

Cystathionine β Synthase from Human, recombinant

Cat. No. NATE-1667

Lot. No. (See product label)

Introduction

Description	Cystathionine-β-synthase, also known as CBS, is an enzyme (EC 4.2.1.22) that in humans is encoded by the CBS gene. 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. CBS is a multidomain enzyme composed of an N-terminal enzymatic domain and two CBS domains. The CBS gene is the most common locus for mutations associated with homocystinuria.
Synonyms	Cystathionine-β-synthase; CBS; EC 4.2.1.22; 9023-99-8; Cystathionine β-synthase; Beta-thionase; methylcysteine synthase; serine sulfhydrase

Product Information

Species	Human
Source	E. coli
Form	Liquid
EC Number	EC 4.2.1.22
Molecular Weight	61.9 kDa (1-551 aa, NT His Tag)
Purity	> 90% by SDS-PAGE
Activity	100 U/mg
Unit Definition	One unit is defined as the amount of enzyme required to convert 1.0 nmole of L-homocysteine to cystathionine and hydrogen sulfide per minute in 200 mM Tris pH 8.6 at 37 °C.

Storage and Shipping Information

Storage	Store at –20°C.
Stability	Stable for at least 1 year as supplied. Avoid repeated freeze and thaw cycles.