

## Cystathionine $\beta$ Synthase from Human, recombinant

Cat. No. NATE-1667

Lot. No. (See product label)

### Introduction

**Description** Cystathionine- $\beta$ -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- $\beta$ -synthase; CBS; EC 4.2.1.22; 9023-99-8; Cystathionine  $\beta$ -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.