

## Native Cystathionine $\beta$ -synthase (CBS) from Microorganism

### Product Information

<b>Cat#</b>	BDE-019
<b>Specification</b>	5 KU, 50 KU, 500 KU
<b>Description</b>	Cystathionine $\beta$ -synthase (CBS) catalyzes the condensation of homocysteine and serine and is a key enzyme in the hydrogen sulfide metabolic pathway.
<b>Applications</b>	Used in homocysteine enzyme-based assay kits to ensure test specificity and accuracy.
<b>Enzyme Commission Number</b>	EC 4.2.1.22
<b>Form</b>	Yellow amorphous lyophilized powder
<b>Source</b>	Microorganism
<b>Activity</b>	$\geq 8$ U/mg
<b>Molecular Weight</b>	51 kDa (SDS-PAGE)
<b>Purity</b>	$\geq 90\%$
<b>Optimum pH</b>	8.0
<b>Optimum temperature</b>	40°C
<b>pH Stability</b>	6.0-10.0 (25°C, 16 h)
<b>Thermal Stability</b>	< 45°C (pH 8.0, 30 min)
<b>Isoelectric Point</b>	5.4
<b>Km Value</b>	$8.0 \times 10^{-4}$ M (L-Serine), $1.6 \times 10^{-4}$ M (L-Homocysteine)
<b>Inhibitors</b>	Not inhibited by NaN <sub>3</sub>
<b>Protectant</b>	Triton X-100
<b>Storage</b>	Store at -25°C to -15°C for 12 months to maintain at least 90% activity.