

Cystathionine gamma-lyase, Recombinant

Product Information

Cat#	NATE-1144
Abbr	CGL, Recombinant
Alias	CGL; CSE
Similar	CGL
Description	Cystathionine gamma-lyase (CGL), or cystathionase (CSE, EC 4.4.1.1), the enzyme participating in the synthesis of cysteine, catalyzes cystathionine deamination action, and form cysteine, alpha ketone butyric acid and NH ₃ . In some bacteria and mammals, including humans, this enzyme takes part in generating hydrogen sulfide. Hydrogen sulfide is one of a few gases that was recently discovered to have a role in cell signaling in the body.
Applications	H ₂ S plays an important role in the regulation of the body's microcirculation, especially the regulation of physiological/pathological processes and related syndromes in the cardiovascular system. Because of the close relationship between CGL and H ₂ S, the study on CGL is of great significance.
Appearance	Yellowish liquid (or lyophilized powder)
Product Overview	As a new gaseous signal molecular, H ₂ S has the similar but different mechanisms with carbon monoxide (CO), nitric oxide (NO) in diastolic function for blood vessels, which has several functions such as the proliferation of vascular smooth muscle, the dilation of coronary artery, increasing myocardial bloodflow, reducing myocardial oxygen consumption and myocardial protection. CGL is an important endogenous enzyme, which produces H ₂ S in cardiovascular and primarily exists in the vascular smooth muscle, endothelial cells.
Form	Freeze dried powder
Enzyme Commission Number	EC 4.4.1.1

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Activity	11.25 KU/mg protein
Molecular Weight	About 44kDa (SDS-PAGE detection)
Purity	>90% (SDS-PAGE test)
pH Stability	7.0 - 9.0
Storage	4°C, store at -20°C for long-term preservation.
Buffer	Phosphate buffer, pH7.4
Synonyms	Cystathionine gamma-lyase; CGL; cystathionase; CSE; EC 4.4.1.1; homoserine deaminase; homoserine dehydratase; cystine desulfhydrase; cysteine desulfhydrase; γ-cystathionase; cystathionase; homoserine deaminase-cystathionase; γ-CTL; cystalysin; cysteine lyase; L-cystathionine cysteine-lyase (deaminating); cystathionine γ-lyase