

Product Information

Carboxypeptidase G from *Pseudomonas* species

Product Number **C9658**

Storage Temperature -20°C

E.C. 3.4.17.11¹

Synonyms: γ -Glutamyl hydrolase; Conjugase;
 γ -Glu-X carboxypeptidase; Folate conjugase;
Pteroyl-poly- γ -glutamate hydrolase;
Lysosomal γ -glutamyl carboxypeptidase

Product Description

Carboxypeptidase G is a lysosomal, thiol-dependent protease, which progressively cleaves γ -glutamyl pteroyl poly- γ -glutamate yielding pteroyl- α -glutamate (folic acid) and free glutamic acid. It is considered highly specific for the γ -glutamyl bond, but not for the C-terminal amino acid of the leaving group.²

Molecular Weight: ~ 90 kDa (homodimer)

The enzyme is activated by Zn^{2+} ions.³

The product is a lyophilized powder containing 60-80% protein (biuret).

Specific Activity: ≥ 3 units/mg protein

Unit Definition: One unit will hydrolyze $1.0\ \mu\text{mole}$ of L-glutamic acid from (+)amethopterin per minute at pH 7.3 at 30°C .

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

The product is soluble in water ($0.5\ \text{mg/ml}$). Solutions should be prepared fresh prior to use.

Storage/Stability

It is recommended to store the product at -20°C . The product, as supplied, is stable for at least 2 years.

References

1. IUBMB Enzyme Nomenclature
2. Levy, C.C., and Goldman, P., J. Biol. Chem., **242**, 2933 (1967).
3. McCullough, J. L. *et al.*, J. Biol. Chem., **246**, 7207 (1971).

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