

Pyroglutamate Aminopeptidase from *Pyrococcus furiosus*, Recombinant

Cat. No. NATE-0648

Lot. No. (See product label)

Introduction

Description Pyroglutamate aminopeptidase is an enzyme that digests proteins. This enzyme is specific for N-terminal pyroglutamic acids. It cleaves the N-terminal pyroglutamic acid from proteins and peptides prior to Edman degradation. The optimal temperature range is 95 to 100°C and the optimal pH range is 6.0 to 9.0.

Applications Thermostable aminopeptidase that liberates N-terminal pyroglutamic acid from proteins and peptides prior to Edman degradation. Pyroglutamate Aminopeptidase, from *Pyrococcus furiosus* is a recombinant, thermostable aminopeptidase that is expressed in *Escherichia coli*. It is used to cleave pyroglutamic acid which allows analysis of N-terminal sequences of peptides. The enzyme from Creative Enzymes has been used for the removal of pyroglutamate (pGlu) N-terminal blocking group, under reduced conditions, prior to N-terminal sequencing of purified cassiicolin.

Synonyms pyroglutamyl-peptidase I; Pyroglutamate aminopeptidase; EC 3.4.19.3; 5-oxopropyl-peptidase; pyrased; pyroglutamate aminopeptidase; pyroglutamyl aminopeptidase; L-pyroglutamyl peptide hydrolase; pyrrolidone-carboxyl peptidase; pyrrolidone-carboxylate peptidase; pyrrolidonyl peptidase; L-pyrrolidonecarboxylate peptidase; pyroglutamidase; pyrrolidonecarboxyl peptidase; 9075-21-2

Product Information

Species *Pyrococcus furiosus*

Source *E. coli*

Form Lyophilized powder containing sodium phosphate

EC Number EC 3.4.19.3

CAS No. 9075-21-2

Molecular Weight mol wt 24.072 kDa by amino acid sequence mol wt 28 kDa by SDS-PAGE

Activity > 0.11 units/mg protein

Optimum pH 6.0 to 9.0

Optimum temperature 95 to 100°C

Unit Definition One unit will hydrolyze 1 µmol of pyroglutamate p-nitroanilide per minute at pH 7.0 at 37°C.

Storage and Shipping Information

Storage -20°C