Creative Enzymes®

Pyroglutamate Aminopeptidase from Pyrococcus furiosus, Recombinant

Cat. No. NATE-0648

Lot. No. (See product label)

Introduction

Description	Pyroglutamate aminopetidase 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-oxoprolyl-peptidase; pyrase; pyroglutamate aminopeptidase; pyroglutamyl aminopeptidase; L-pyroglutamyl peptide hydrolase; pyrrolidone-carboxyl peptidase; pyrrolidone-carboxylate peptidase; pyrrolidonyl peptidase; L-pyrrolidonecarboxylate peptidase; pyroglutamidase; pyrrolidonecarboxylyl 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