Creative Enzymes®

1-piperideine-2-carboxylate/1-pyrroline-2-carboxylate reductase (NADPH)

Cat. No. EXWM-1503

Lot. No. (See product label)

Introduction

Description	The enzyme is involved in the catabolism of D-lysine and D-proline in bacteria that belong to the Pseudomonas genus. In contrast to EC 1.5.1.1, 1-piperideine-2-carboxylate/1-pyrroline-2-carboxylate reductase [NAD(P)H], which shows similar activity with NADPH and NADH, this enzyme is specific for NADPH.
Synonyms	Pyr2C reductase; 1,2-didehydropipecolate reductase; P2C reductase; 1,2-didehydropipecolic reductase; DELTA1-piperideine-2-carboxylate/1-pyrroline-2-carboxylate reductase (ambiguous); L-pipecolate:NADP+ 2-oxidoreductase; DELTA1-piperideine-2-carboxylate reductase; Δ1-piperideine-2-carboxylate reductase

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 1.5.1.21
CAS No.	52037-88-4
Reaction	(1) L-pipecolate + NADP+ = 1-piperideine-2-carboxylate + NADPH + H+; (2) L-proline + NADP+ = 1-pyrroline-2-carboxylate + NADPH + H+
Notes	This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

Storage and Shipping Information

Storage	Store it at +4 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.