Creative Enzymes®

lysine 6-dehydrogenase

Cat. No. EXWM-1451

Lot. No. (See product label)

Introduction

Description	The enzyme is highly specific for L-lysine as substrate, although S-(2-aminoethyl)-L-cysteine can act as a substrate, but more slowly. While the enzyme from Agrobacterium tumefaciens can use only NAD+, that from the thermophilic bacterium Geobacillus stearothermophilus can also use NADP+, but more slowly.
Synonyms	L-lysine ε-dehydrogenase; L-lysine 6-dehydrogenase; LysDH

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 1.4.1.18
CAS No.	89400-30-6
Reaction	L-lysine + NAD+ = (S)-2,3,4,5-tetrahydropyridine-2-carboxylate + NADH + H+ + NH3 (overall reaction); (1a) L-lysine + NAD+ + H2O = (S)-2-amino-6-oxohexanoate + NADH + H+ + NH3; (1b) (S)-2-amino-6-oxohexanoate = (S)-2,3,4,5-tetrahydropyridine-2-carboxylate + H2O (spontaneous)
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 ℃.