

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 °C for short term. For long term storage, store it at -20 °C~-80 °C.