

L-aminoadipate-semialdehyde dehydrogenase

Cat. No. EXWM-1138

Lot. No. (See product label)

Introduction

Description (S)-2-amino-6-oxohexanoate undergoes a spontaneous dehydration forming the cyclic (S)-2,3,4,5-tetrahydropyridine-2-carboxylate, which serves as a substrate for the hydrogenation reaction.

Synonyms aminoadipate semialdehyde dehydrogenase; 2-aminoadipate semialdehyde dehydrogenase; α -aminoadipate-semialdehyde dehydrogenase; α -aminoadipate reductase; 2-aminoadipic semialdehyde dehydrogenase; L- α -aminoadipate Δ -semialdehyde oxidoreductase; L- α -aminoadipate Δ -semialdehyde:NAD⁺ oxidoreductase; L- α -aminoadipate Δ -semialdehyde:nicotinamide adenine dinucleotide oxidoreductase; L-2-aminoadipate 6-semialdehyde:NAD(P)⁺ 6-oxidoreductase

Product Information

Form Liquid or lyophilized powder

EC Number EC 1.2.1.31

CAS No. 9067-87-2

Reaction (S)-2-amino-6-oxohexanoate + NAD(P)⁺ + H₂O = L-2-aminoadipate + NAD(P)H + H⁺ (overall reaction);
(1a) (S)-2-amino-6-oxohexanoate = (S)-2,3,4,5-tetrahydropyridine-2-carboxylate + H₂O (spontaneous);
(1b) (S)-2,3,4,5-tetrahydropyridine-2-carboxylate + NAD(P)⁺ + 2 H₂O = L-2-aminoadipate + NAD(P)H + 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 °C for short term. For long term storage, store it at -20 °C~-80 °C.