Creative Enzymes®

LL-diaminopimelate aminotransferase

Cat. No. EXWM-2924

Lot. No. (See product label)

Introduction

Description	A pyridoxal-phosphate enzyme. In vivo, the reaction occurs in the opposite direction to that shown above. This is one of the final steps in the lysine-biosynthesis pathway of plants (ranging from mosses to flowering plants). meso-Diaminoheptanedioate, an isomer of LL-2,6-diaminoheptanedioate, and the structurally related compounds lysine and ornithine are not substrates. 2-Oxoglutarate cannot be replaced by oxaloacetate or pyruvate. It is not yet known if the substrate of the biosynthetic reaction is the cyclic or acyclic form of tetrahydropyridine-2,6-dicarboxylate.
Synonyms	LL-diaminopimelate transaminase; LL-DAP aminotransferase; LL-DAP-AT

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 2.6.1.83
CAS No.	949001-34-7
Reaction	LL-2,6-diaminoheptanedioate + 2-oxoglutarate = (S)-2,3,4,5-tetrahydropyridine-2,6-dicarboxylate + L-glutamate + H2O
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 ℃.