

clavamate synthase

Cat. No. EXWM-0638

Lot. No. (See product label)

Introduction

Description Contains nonheme iron. Catalyses three separate oxidative reactions in the pathway for the biosynthesis of the β -lactamase inhibitor clavulanate in *Streptomyces clavuligerus*. The first step (hydroxylation) is separated from the latter two (oxidative cyclization and desaturation) by the action of EC 3.5.3.22, proclavamate amidinohydrolase. The three reactions are all catalysed at the same nonheme iron site.

Synonyms clavamate synthase 2; clavaminic acid synthase

Product Information

Form Liquid or lyophilized powder

EC Number EC 1.14.11.21

CAS No. 122799-56-8

Reaction (1) deoxyamidinoproclavamate + 2-oxoglutarate + O₂ = amidinoproclavamate + succinate + CO₂; (2) proclavamate + 2-oxoglutarate + O₂ = dihydroclavamate + succinate + CO₂ + H₂O; (3) dihydroclavamate + 2-oxoglutarate + O₂ = clavamate + succinate + CO₂ + 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 °C for short term. For long term storage, store it at -20 °C~-80 °C.