Creative Enzymes®

3,4-dihydroxyphenylalanine oxidative deaminase

Cat. No. EXWM-0607

Lot. No. (See product label)

Introduction

Description This enzyme is one of the three enzymes involved in L-dopa (3,4-dihydroxy-L-phenylalanine) catabolism in the non-oxygenic phototrophic bacterium Rubrivivax benzoatilyticus OU5 (and not Rhodobacter sphaeroides OU5 as had been thought), the other two being EC 4.3.1.22 (dihydroxyphenylalanine reductive deaminase) and EC 2.6.1.49 (3,4-dihydroxyphenylalanine transaminase). In addition to L-dopa, the enzyme can also use L-tyrosine, L-phenylalanine, L-tryptophan and glutamate as substrate, but more slowly. The enzyme is inhibited by NADH and 2-oxoglutarate.

Synonyms 3,4-dihydroxy-L-phenylalanine: oxidative deaminase; oxidative deaminase; DOPA oxidative deaminase; DOPAODA

Product Information

Form Liquid or lyophilized powder

EC Number EC 1.13.12.15

Reaction 2 L-dopa + O2 = 2 3,4-dihydroxyphenylpyruvate + 2 NH3

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 ℃.