Creative Enzymes®

tryptophan synthase (indole-salvaging)

Cat. No. EXWM-4963

Lot. No. (See product label)

Introduction

Description Most mesophilic bacteria have a multimeric tryptophan synthase complex (EC 4.2.1.20) that forms L-tryptophan from L-serine and 1-C-(indol-3-yl)glycerol 3-phosphate via an indole intermediate. This intermediate, which is formed by the α subunits, is transferred in an internal tunnel to the β units, which convert it to tryptophan. In thermophilic organisms the high temperature enhances diffusion and causes the loss of indole. This enzyme, which does not combine with the α unit to form a complex, salvages the lost indole back to L-tryptophan. It has a much lower Km for indole than the β subunit of EC 4.2.1.20.

Synonyms tryptophan synthase β2

Product Information

Form Liquid or lyophilized powder

EC Number EC 4.2.1.122

Reaction L-serine + indole = L-tryptophan + 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 ℃.