

methionine γ -lyase

Cat. No. EXWM-5314

Lot. No. (See product label)

Introduction

Description A pyridoxal-phosphate protein. The enzyme cleaves a carbon-sulfur bond, releasing methanethiol and an unstable enamine product that tautomerizes to an imine form, which undergoes a hydrolytic deamination to form 2-oxobutanoate and ammonia. The latter reaction, which can occur spontaneously, can also be catalysed by EC 3.5.99.10, 2-iminobutanoate/2-iminopropanoate deaminase. The enzyme is involved in L-methionine catabolism.

Synonyms L-methioninase; methionine lyase; methioninase; methionine dethiomethylase; L-methionine γ -lyase; L-methionine methanethiol-lyase (deaminating)

Product Information

Form Liquid or lyophilized powder

EC Number EC 4.4.1.11

CAS No. 42616-25-1

Reaction L-methionine + H₂O = methanethiol + NH₃ + 2-oxobutanoate (overall reaction); (1a) L-methionine = methanethiol + 2-aminobut-2-enoate; (1b) 2-aminobut-2-enoate = 2-iminobutanoate (spontaneous); (1c) 2-iminobutanoate + H₂O = 2-oxobutanoate + NH₃ (spontaneous)

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.