

cysteine-S-conjugate β -lyase

Cat. No. EXWM-5315

Lot. No. (See product label)

Introduction

Description

A pyridoxal-phosphate protein. The enzyme can act on a broad range of L-cysteine-S-conjugates, including aromatic conjugates such as 4-bromobenzene and 2,4-dinitrobenzene. The enzyme cleaves a carbon-sulfur bond, releasing a thiol and an unstable enamine product that tautomerizes to an imine form, which undergoes a hydrolytic deamination to form pyruvate and ammonia. The latter reaction, which can occur spontaneously, can also be catalysed by EC 3.5.99.10, 2-iminobutanoate/2-iminopropanoate deaminase.

Synonyms

cysteine conjugate β -lyase; glutamine transaminase K/cysteine conjugate β -lyase; L-cysteine-S-conjugate thiol-lyase (deaminating)

Product Information

Form Liquid or lyophilized powder

EC Number EC 4.4.1.13

CAS No. 68652-57-3

Reaction an L-cysteine-S-conjugate + H₂O = a thiol + NH₃ + pyruvate (overall reaction); (1a) an L-cysteine-S-conjugate = a thiol + 2-aminoprop-2-enoate; (1b) 2-aminoprop-2-enoate = 2-iminopropanoate (spontaneous); (1c) 2-iminopropanoate + H₂O = pyruvate + 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.