

trypanothione synthase

Cat. No. EXWM-5729

Lot. No. (See product label)

Introduction

Description

The enzyme, characterized from several trypanosomatids (e.g. *Trypanosoma cruzi*) catalyses two subsequent reactions, leading to production of trypanothione from glutathione and spermidine. Some trypanosomatids (e.g. *Crithidia* species and some *Leishmania* species) also contain an enzyme that only carries out the first reaction (cf. EC 6.3.1.8, glutathionylspermidine synthase). The enzyme is bifunctional, and also catalyses the hydrolysis of glutathionylspermidine and trypanothione (cf. EC 3.5.1.78, glutathionylspermidine amidase).

Synonyms

glutathionylspermidine:glutathione ligase (ADP-forming)

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 6.3.1.9

CAS No.

130246-69-4

Reaction

(1) glutathione + spermidine + ATP = glutathionylspermidine + ADP + phosphate;
(2) glutathione + glutathionylspermidine + ATP = N1,N8-bis(glutathionyl)spermidine + ADP + phosphate

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.