Creative Enzymes®

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 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.