Creative Enzymes®

cyanophycin synthase (L-arginine-adding)

Cat. No. EXWM-5747

Lot. No. (See product label)

Introduction

Description	Requires Mg2+ for activity. Both this enzyme and EC 6.3.2.29, cyanophycin synthase (L-aspartate-adding), are required for the elongation of cyanophycin, which is a protein-like cell inclusion that is unique to cyanobacteria and acts as a temporary nitrogen store. Both enzymes are found in the same protein but have different active sites. Both L-Asp and L-Arg must be present before either enzyme will display significant activity. Canavanine and lysine can be incoporated into the polymer instead of arginine.
Synonyms	CphA (ambiguous); CphA1 (ambiguous); CphA2 (ambiguous); cyanophycin synthetase (ambiguous); multi-L-arginyl-poly-L-aspartate synthase (ambiguous)

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 6.3.2.30
CAS No.	131554-17-1
Reaction	ATP + [L-Asp(4-L-Arg)]n-L-Asp + L-Arg = ADP + phosphate + [L-Asp(4-L-Arg)]n+1
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 ℃.