Creative Enzymes®

ferredoxin:protochlorophyllide reductase (ATP-dependent)

Cat. No. EXWM-1402

Lot. No. (See product label)

Introduction

Description	Occurs in photosynthetic bacteria, cyanobacteria, green algae and gymnosperms. The enzyme catalyses trans-reduction of the D-ring of protochlorophyllide; the product has the (7S,8S)-configuration. Unlike EC 1.3.1.33 (protochlorophyllide reductase), light is not required. The enzyme contains a [4Fe-4S] cluster, and structurally resembles the Fe protein/MoFe protein complex of nitrogenase (EC 1.18.6.1), which catalyses an ATP-driven reduction.
Synonyms	light-independent protochlorophyllide reductase

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 1.3.7.7
Reaction	chlorophyllide a + oxidized ferredoxin + 2 ADP + 2 phosphate = protochlorophyllide a + reduced ferredoxin + 2 ATP + 2 H2O
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 ℃.