Creative Enzymes®

phycobiliprotein cysteine-84 phycobilin lyase

Cat. No. EXWM-5331

Lot. No. (See product label)

Introduction

Description	The enzyme, found in cyanobacteria and red algae, catalyses the attachment of phycobilin chromophores to cysteine 84 of several phycobiliproteins (the numbering used here corresponds to the enzyme from Anabaena, in other organisms the number may vary slightly). It can attach phycocyanobilin to the β subunits of C-phycocyanin and phycoerythrocyanin and to both subunits of allophycocyanin. In addition, it can attach phycoerythrobilin to both subunits of C-phycoerythrin.
Synonyms	cpcS (gene name); cpeS (gene name); cpcS1 (gene name); cpcU (gene name); phycocyanobilin:Cys-β84-phycobiliprotein lyase

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 4.4.1.29
Reaction	(1) [C-phycocyanin β-subunit]-Cys84-phycocyanobilin = apo-[C-phycocyanin β-subunit] + (2R,3E)-phycocyanobilin; (2) [phycoerythrocyanin β-subunit]-Cys84-phycocyanobilin = apo-[phycoerythrocyanin β-subunit] + (2R,3E)-phycocyanobilin; (3) [allophycocyanin α-subunit]-Cys84-phycocyanobilin = apo-[allophycocyanin α-subunit] + (2R,3E)-phycocyanobilin; (4) [allophycocyanin β-subunit]-Cys84-phycocyanobilin = apo-[allophycocyanin β-subunit] + (2R,3E)-phycocyanobilin; (5) [C-phycoerythrin α-subunit]-Cys84-phycoerythrobilin = apo-[C-phycoerythrin α-subunit] + (2R,3E)-phycoerythrobilin; (6) [C-phycoerythrin β-subunit]-Cys84-phycoerythrobilin = apo-[C-phycoerythrin β-subunit] + (2R,3E)-phycoerythrobilin;
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 ℃.