

## 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  $\beta$  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- $\beta$ 84-phycobiliprotein lyase

### Product Information

**Form** Liquid or lyophilized powder

**EC Number** EC 4.4.1.29

**Reaction** (1) [C-phycocyanin  $\beta$ -subunit]-Cys84-phycocyanobilin = apo-[C-phycocyanin  $\beta$ -subunit] + (2R,3E)-phycocyanobilin; (2) [phycoerythrocyanin  $\beta$ -subunit]-Cys84-phycocyanobilin = apo-[phycoerythrocyanin  $\beta$ -subunit] + (2R,3E)-phycocyanobilin; (3) [allophycocyanin  $\alpha$ -subunit]-Cys84-phycocyanobilin = apo-[allophycocyanin  $\alpha$ -subunit] + (2R,3E)-phycocyanobilin; (4) [allophycocyanin  $\beta$ -subunit]-Cys84-phycocyanobilin = apo-[allophycocyanin  $\beta$ -subunit] + (2R,3E)-phycocyanobilin; (5) [C-phycoerythrin  $\alpha$ -subunit]-Cys84-phycoerythrobilin = apo-[C-phycoerythrin  $\alpha$ -subunit] + (2R,3E)-phycoerythrobilin; (6) [C-phycoerythrin  $\beta$ -subunit]-Cys84-phycoerythrobilin = apo-[C-phycoerythrin  $\beta$ -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 °C for short term. For long term storage, store it at -20 °C~-80 °C.