

## C-terminal processing peptidase

Cat. No. EXWM-4097

Lot. No. (See product label)

### Introduction

#### Description

Proteolytic processing of the D1 protein of photosystem II is necessary to allow the light-driven assembly of the tetranuclear manganese cluster, which is responsible for photosynthetic water oxidation. The recognition of the substrate is mediated by a PDZ domain, a small protein module that promotes protein-protein interactions by binding to internal or C-terminal sequences of their partner proteins. Type example of peptidase family S41.

#### Synonyms

CtpA gene product (Synechocystis sp.); photosystem II D1 protein processing peptidase; protease Re; tail-specific protease; Tsp protease

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 3.4.21.102

#### CAS No.

216484-75-2, 92480-11-0

#### Reaction

The enzyme shows specific recognition of a C-terminal tripeptide, Xaa-Yaa-Zaa, in which Xaa is preferably Ala or Leu, Yaa is preferably Ala or Tyr, and Zaa is preferably Ala, but then cleaves at a variable distance from the C-terminus. A typical cleavage is -Ala-Ala-Arg-Ala-Ala-Lys-Glu-Asn-Tyr-Ala-Leu-Ala-Ala. In the plant chloroplast, the enzyme removes the C-terminal extension of the D1 polypeptide of photosystem II

#### 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.