Creative Enzymes®

pheophorbidase

Cat. No. EXWM-3511

Lot. No. (See product label)

Introduction

Description	This enzyme forms part of the chlorophyll degradation pathway, and is found in higher plants and in algae. In higher plants it participates in de-greening processes such as fruit ripening, leaf senescence, and flowering. The enzyme exists in two forms: type 1 is induced by senescence whereas type 2 is constitutively expressed. The enzyme is highly specific for pheophorbide as substrate (with a preference for pheophorbide a over pheophorbide b) as other chlorophyll derivatives such as protochlorophyllide a, pheophytin a and c, chlorophyll a and b, and chlorophyllide a cannot act as substrates. Another enzyme, called pheophorbide demethoxycarbonylase (PDC),produces pyropheophorbide a from pheophorbide a without forming an intermediate although the precise reaction is not yet known.
Synonyms	phedase; PPD

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 3.1.1.82
Reaction	pheophorbide a + H2O = pyropheophorbide a + methanol + CO2 (overall reaction); (1a) pheophorbide a + H2O = C-132-carboxypyropheophorbide a + methanol; (1b) C-132-carboxypyropheophorbide a = pyropheophorbide a + CO2 (spontaneous)
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 ℃.