Creative Enzymes®

Pup amidohydrolase

Cat. No. EXWM-4399

Lot. No. (See product label)

Introduction

Description	The enzyme has been characterized from the bacterium Mycobacterium tuberculosis. It catalyses the hydrolysis of the amido group of the C-terminal glutamine of prokaryotic ubiquitin-like protein (Pup), thus activating it for ligation to target proteins, a process catalysed by EC 6.3.1.19, prokaryotic ubiquitin-like protein ligase. The reaction requires ATP as cofactor but not its hydrolysis. The enzyme also catalyses the hydrolytic cleavage of the bond formed by the ligase, between an ε-amino group of a lysine residue of the target protein and the γ-carboxylate of the C-terminal glutamate of the prokaryotic ubiquitin-like protein.
Synonyms	dop (gene name); Pup deamidase; depupylase/deamidase; DPUP; depupylase

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 3.5.1.119
Reaction	[prokaryotic ubiquitin-like protein]-L-glutamine + H2O = [prokaryotic ubiquitin-like protein]-L-glutamate + NH3
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 ℃.