

## 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  $\epsilon$ -amino group of a lysine residue of the target protein and the  $\gamma$ -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 + H<sub>2</sub>O = [prokaryotic ubiquitin-like protein]-L-glutamate + NH<sub>3</sub>

**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.