

## [lysine-biosynthesis-protein LysW]-L-2-aminoadipate ligase

Cat. No. EXWM-5761

Lot. No. (See product label)

### Introduction

#### Description

The enzymes from the thermophilic bacterium *Thermus thermophilus* and the thermophilic archaea *Sulfolobus acidocaldarius* and *Sulfolobus tokodaii* protect the amino group of L-2-aminoadipate by conjugation to the carrier protein LysW. This reaction is part of the lysine biosynthesis pathway in these organisms.

#### Synonyms

$\alpha$ -aminoadipate-lysW ligase lysX (gene name); LysX (ambiguous); AAA-LysW ligase

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 6.3.2.43

#### Reaction

ATP + [lysine-biosynthesis-protein LysW]-C-terminal-L-glutamate + L-2-aminoadipate = ADP + phosphate + [lysine-biosynthesis-protein LysW]-C-terminal- $\gamma$ -(L-2-aminoadip-2-yl)-L-glutamate

#### 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.