

## 4-hydroxy-tetrahydrodipicolinate synthase

Cat. No. EXWM-5308

Lot. No. (See product label)

### Introduction

**Description** Studies of the enzyme from the bacterium *Escherichia coli* have shown that the reaction can be divided into three consecutive steps: Schiff base formation between pyruvate and an active-site lysine, the addition of L-aspartate-semialdehyde, and finally transamination leading to cyclization with simultaneous dissociation of the product.

**Synonyms** dihydrodipicolinate synthase (incorrect); dihydropicolinate synthetase (incorrect); dihydrodipicolinic acid synthase (incorrect); L-aspartate-4-semialdehyde hydro-lyase (adding pyruvate and cyclizing); dapA (gene name).

### Product Information

**Form** Liquid or lyophilized powder

**EC Number** EC 4.3.3.7

**Reaction** pyruvate + L-aspartate-4-semialdehyde = (2S,4S)-4-hydroxy-2,3,4,5-tetrahydrodipicolinate + H<sub>2</sub>O

**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.