

## pyridoxal 5'-phosphate synthase (glutamine hydrolysing)

Cat. No. EXWM-5307

Lot. No. (See product label)

### Introduction

**Description** The ammonia is provided by the glutaminase subunit and channeled to the active site of the lyase subunit by a 100 Å tunnel. The enzyme can also use ribulose 5-phosphate and dihydroxyacetone phosphate. The enzyme complex is found in aerobic bacteria, archaea, fungi and plants.

**Synonyms** PdxST

### Product Information

**Form** Liquid or lyophilized powder

**EC Number** EC 4.3.3.6

**Reaction** D-ribose 5-phosphate + D-glyceraldehyde 3-phosphate + L-glutamine = pyridoxal 5'-phosphate + L-glutamate + 3 H<sub>2</sub>O + phosphate (overall reaction); (1a) L-glutamine + H<sub>2</sub>O = L-glutamate + NH<sub>3</sub>; (1b) D-ribose 5-phosphate + D-glyceraldehyde 3-phosphate + NH<sub>3</sub> = pyridoxal 5'-phosphate + 4 H<sub>2</sub>O + phosphate

**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.