

## 4-phosphoerythronate dehydrogenase

Cat. No. EXWM-0199

Lot. No. (See product label)

### Introduction

#### Description

This enzyme catalyses a step in a bacterial pathway for the biosynthesis of pyridoxal 5'-phosphate. The enzyme contains a tightly-bound NAD(H) cofactor that is not re-oxidized by free NAD<sup>+</sup>. In order to re-oxidize the cofactor and restore enzyme activity, the enzyme catalyses the reduction of a 2-oxo acid (such as 2-oxoglutarate, oxaloacetate, or pyruvate) to the respective (R)-hydroxy acid. cf. EC 1.1.1.399, 2-oxoglutarate reductase.

#### Synonyms

PdxB; PdxB 4PE dehydrogenase; 4-O-phosphoerythronate dehydrogenase; 4PE dehydrogenase; erythronate-4-phosphate dehydrogenase

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 1.1.1.290

#### CAS No.

125858-75-5

#### Reaction

4-phospho-D-erythronate + NAD<sup>+</sup> = (3R)-3-hydroxy-2-oxo-4-phosphonooxybutanoate + NADH + H<sup>+</sup>

#### 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.