Creative Enzymes®

4-hydroxythreonine-4-phosphate dehydrogenase

Cat. No. EXWM-0168

Lot. No. (See product label)

Introduction

Description	The product of the reaction undergoes decarboxylation to give 3-amino-2-oxopropyl phosphate. The enzyme is part of the biosynthesis pathway of the coenzyme pyridoxal 5'-phosphate found in anaerobic bacteria.
Synonyms	NAD+-dependent threonine 4-phosphate dehydrogenase; L-threonine 4-phosphate dehydrogenase; 4-(phosphohydroxy)-L-threonine dehydrogenase; PdxA; 4-(phosphonooxy)-L-threonine:NAD+ oxidoreductase

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 1.1.1.262
CAS No.	230310-36-8
Reaction	4-phosphonooxy-L-threonine + NAD+ = 3-amino-2-oxopropyl phosphate + CO2 + NADH + H+ (overall reaction); (1a) 4-phosphonooxy-L-threonine + NAD+ = (2S)-2-amino-3-oxo-4-phosphonooxybutanoate + NADH + H+; (1b) (2S)-2-amino-3-oxo-4-phosphonooxybutanoate = 3-amino-2-oxopropyl phosphate + CO2 (spontaneous)
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 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.