

isocitrate-homoisocitrate dehydrogenase

Cat. No. EXWM-0194

Lot. No. (See product label)

Introduction

Description

Requires Mn^{2+} and K^+ or NH_4^+ for activity. Unlike EC 1.1.1.41, isocitrate dehydrogenase (NAD^+) and EC 1.1.1.87, homoisocitrate dehydrogenase, this enzyme, from *Pyrococcus horikoshii*, can use both isocitrate and homoisocitrate as substrates. The enzyme may play a role in both the lysine and glutamate biosynthesis pathways.

Synonyms

homoisocitrate-isocitrate dehydrogenase; PH1722

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 1.1.1.286

Reaction

(1) isocitrate + NAD^+ = 2-oxoglutarate + CO_2 + $NADH$; (2) (1R,2S)-1-hydroxybutane-1,2,4-tricarboxylate + NAD^+ = 2-oxoadipate + CO_2 + $NADH$ + H^+

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.