Creative Enzymes®

D-2-hydroxyacid dehydrogenase (NAD+)

Cat. No. EXWM-0260

Lot. No. (See product label)

Introduction

Description	The enzymes, characterized from bacteria (Peptoclostridium difficile, Enterococcus faecalis and from lactic acid bacteria) prefer substrates with a main chain of 5 carbons (such as 4-methyl-2-oxopentanoate) to those with a shorter chain. It also utilizes phenylpyruvate. The enzyme from the halophilic archaeon Haloferax mediterranei prefers substrates with a main chain of 3-4 carbons (pyruvate and 2-oxobutanoate). cf. EC 1.1.1.272, (D)-2-hydroxyacid dehydrogenase (NADP+).
Synonyms	LdhA; HdhD; D-2-hydroxyisocaproate dehydrogenase; R-HicDH; D-HicDH; (R)-2-hydroxy-4-methylpentanoate:NAD+ oxidoreductase; (R)-2-hydroxyisocaproate dehydrogenase; D-mandelate dehydrogenase (ambiguous)

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 1.1.1.345
Reaction	an (R)-2-hydroxycarboxylate + NAD+ = a 2-oxocarboxylate + 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 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.