Creative Enzymes®

dihydrolipoyllysine-residue (2-methylpropanoyl)transferase

Cat. No. EXWM-2108

Lot. No. (See product label)

Introduction

Description	A multimer (24-mer) of this enzyme forms the core of the multienzyme 3-methyl-2-oxobutanoate dehydrogenase complex, and binds tightly both EC 1.2.4.4, 3-methyl-2-oxobutanoate dehydrogenase (2-methylpropanoyl-transferring) and EC 1.8.1.4, dihydrolipoyl dehydrogenase. The lipoyl group of this enzyme is reductively 2-methylpropanoylated by EC 1.2.4.4, and the only observed direction catalysed by EC 2.3.1.168 is that where this 2-methylpropanoyl is passed to coenzyme A. In addition to the 2-methylpropanoyl group, formed when EC 1.2.4.4 acts on the oxoacid that corresponds with valine, this enzyme also transfers the 3-methylbutanoyl and S-2-methylbutanoyl groups, donated to it when EC 1.2.4.4 acts on the oxo acids corresponding with leucine and isoleucine.
Synonyms	dihydrolipoyl transacylase; enzyme-dihydrolipoyllysine:2-methylpropanoyl-CoA S-(2-methylpropanoyl)transferase; 2-methylpropanoyl-CoA:enzyme-6-N-(dihydrolipoyl)lysine S-(2-methylpropanoyl)transferase

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 2.3.1.168
CAS No.	102784-26-9
Reaction	2-methylpropanoyl-CoA + enzyme N6-(dihydrolipoyl)lysine = CoA + enzyme N6-(S-[2-methylpropanoyl]dihydrolipoyl)lysine
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 ℃.