Creative Enzymes®

2-oxoglutarate synthase

Cat. No. EXWM-1226

Lot. No. (See product label)

Introduction

Description	The enzyme contains thiamine diphosphate and two [4Fe-4S] clusters. Highly specific for 2-oxoglutarate. This enzyme is a member of the 2-oxoacid oxidoreductases, a family of enzymes that oxidatively decarboxylate different 2-oxoacids to form their CoA derivatives, and are differentiated based on their substrate specificity. For examples of other members of this family, see EC 1.2.7.1, pyruvate synthase and EC 1.2.7.7, 3-methyl-2-oxobutanoate dehydrogenase (ferredoxin).
Synonyms	2-ketoglutarate ferredoxin oxidoreductase; 2-oxoglutarate:ferredoxin oxidoreductase; KGOR; 2-oxoglutarate ferredoxin oxidoreductase; 2-oxoglutarate:ferredoxin 2-oxidoreductase (CoA-succinylating)

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 1.2.7.3
CAS No.	37251-05-1
Reaction	2-oxoglutarate + CoA + 2 oxidized ferredoxin = succinyl-CoA + CO2 + 2 reduced ferredoxin + 2 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 ℃.