Creative Enzymes®

Native Pseudomonas sp. Sarcosine Dehydrogenase

Cat. No. NATE-0663

Lot. No. (See product label)

Introduction

Description	In enzymology, sarcosine dehydrogenase (EC 1.5.99.1) is a mitochondrial enzyme that catalyzes the chemical reaction N-demethylation of sarcosine to give glycine. This enzyme belongs to the family of oxidoreductases, specifically those acting on the CH-NH group of donor with other acceptors. Sarcosine dehydrogenase is closely related to dimethylglycine dehydrogenase, which catalyzes the demethylation reaction of dimethylglycine to sarcosine. Both sarcosine dehydrogenase and dimethylglycine dehydrogenase use FAD as a cofactor. Sarcosine dehydrogenase is linked by electron-transferring flavoprotein (ETF) to the respiratory redox chain.
Synonyms	sarcosine dehydrogenase; EC 1.5.99.1; sarcosine N-demethylase; monomethylglycine dehydrogenase; sarcosine: (acceptor) oxidoreductase (demethylating); 37228-65-2; EC 1.5.8.3

Product Information

Source	Pseudomonas sp.
Form	Lyophilized powder containing approx. 60% sucrose, 10% potassium phosphate buffer salts and trace EDTA
EC Number	EC 1.5.99.1
CAS No.	37228-65-2
Activity	0.5-1.5 units/mg protein
Unit Definition	One unit will convert 1.0 µmole of sarcosine to glycine and formaldehyde per min at pH 7.5 at 37°C.

Storage and Shipping Information

Storage	2-8°C