Creative Enzymes®

Native E.coli Sarcosine Oxidase

Cat. No. DIA-290

Lot. No. (See product label)

Introduction

Description	Oxidoreductase that catalyzes the demethylation of sarcosine to glycine. Use Sarcosine Oxidase in your preferred creatinine reagent mix and rely on the proven diagnostic quality of this product.
Applications	Use Sarcosine Oxidase in diagnostic tests for the determination of creatinine. This can be done using one of two methods: (1) In combination with Creatinase and Creatininase. (2) In combination with Creatinine Deaminase, N-Carbamoylsarcosine Amidase and N-Methylhydantoinase (ATP-hydrolyzing).
Synonyms	Sarcosine Oxidase; SAO

Product Information

Source	E. coli
Appearance	Yellow lyophilizate
CAS No.	9029-22-5
Molecular Weight	40 kD
Activity	22-40 U/mg lyophilizate; >45 U/mg protein
Contaminants	ATPase: <0.01 Catalase: <10.0 Contaminating oxidases (FOX): <0.005 Creatinase: <0.001 Creatininase: <0.01 Creatinine deaminase: <0.001 N-Carbamoylsarcosine amidohydrolase: <0.001 N-Methylhydantoinase: <0.001
Isoelectric point	5.3
pH Stability	7.0-10.0
Optimum pH	8
Thermal stability	Up to +50°C
Michaelis Constant	at +25°C: 3.7 x 10-3 mol/l at +37°C: 6.3 x 10-3 mol/l
Specificity	Sarcosine Oxidase reacts with sarcosine (100%), N-ethylglycine, 2 mmol/l (4%), L(-)-proline (0.28%), carbamoylsarcosine (0%), and glycine (0%).
Inhibitors	Completely inhibited by $ZnCl_2$ (7 mmol/l), $CdCl_2$ (7 mol/l), heavy metals and NaN_3. Chloroacetic amine (0.2%) does not inhibit.

Storage and Shipping Information

Stability	At -15 to -25°C within specification range for 12 months. Store dry. Protect from light.