

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: 3.7×10^{-3} mol/l at +37°C: 6.3×10^{-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 ZnCl₂ (7 mmol/l), CdCl₂ (7 mol/l), heavy metals and NaN₃. 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.