Creative Enzymes®

Chemically modified Cucurbita species Ascorbate Oxidase

Cat. No. DIA-283

Lot. No. (See product label)

Introduction

Description	Oxidoreductase that oxidizes ascorbic acid to dehydroascorbate. Take advantage of the improved stability in liquid reagents. Rely on the proven diagnostic quality of this product.
Applications	Use Ascorbate Oxidase, chemically modified, in a variety of diagnostic tests to eliminate the interference of ascorbic acid, since ascorbic acid interferes with the Trinder reaction that is widely used for the colorimetric determination of analytes. It is useful in liquid as well as dry chemistry test, e.g., for the determination of uric acid, lactate or creatinine.
Synonyms	ascorbase; ascorbic acid oxidase; ascorbate oxidase; ascorbic oxidase; ascorbate dehydrogenase; L-ascorbic acid oxidase; AAO; L-ascorbate: O2 oxidoreductase; AA oxidase; L-ascorbate oxidase

Product Information

Source	Cucurbita species
Appearance	Turquoise lyophilizate
Molecular Weight	Approximately 140 kD
Activity	>180 U/mg lyophilizate (+37°C, L-ascorbate); Specific activity (+37°C): >1,800 U/mg protein
Contaminants	Catalase: <0.2 Glutamate oxalacetate transaminase (AST): <0.0003 Glutamate pyruvate transaminase (ALT): <0.0005 Contaminating oxidases (FOX): <0.0002
Isoelectric point	5.0-6.0
pH Stability	6.5-9.0
Optimum pH	5.6-7.0
Thermal stability	Up to +70°C
Michaelis Constant	L-ascorbate: 3 x 10-4 mol/l
Specificity	Several analogs of ascorbate react.
Inhibitors	4-chloromercuribenzoate, CN-, Na2S, diethyl-dithiocarbamate, 8-hydroxyquinoline, K-ethylxanthate

Storage and Shipping Information

Stability	At -15 to -25°C within specification range for 12 months. Store dry. Keep tightly sealed.