

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: 3×10^{-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.