

Native Porcine Mutarotase

Cat. No. NATE-0465

Lot. No. (See product label)

Introduction

Description

In enzymology, an aldose 1-epimerase (EC 5.1.3.3) is an enzyme that catalyzes the chemical reaction: $\alpha\text{-D-glucose} \rightleftharpoons \beta\text{-D-glucose}$. Hence, this enzyme has one substrate, $\alpha\text{-D-glucose}$, and one product, $\beta\text{-D-glucose}$. This enzyme belongs to the family of isomerases, specifically those racemases and epimerases acting on carbohydrates and derivatives. This enzyme participates in glycolysis and gluconeogenesis.

Applications

Clinical Chemistry

Synonyms

mutarotase; aldose mutarotase; galactose mutarotase; galactose 1-epimerase; D-galactose 1-epimerase; aldose 1-epimerase; EC 5.1.3.3

Product Information

Species

Porcine

Source

Porcine kidney

Form

A suspension in 80% saturated ammonium sulphate solution, pH 8.0

EC Number

EC 5.1.3.3

CAS No.

9031-76-9

Unit Definition

The amount of enzyme causing an increase in the rate of spontaneous mutarotation of D-glucose of one micromole per minute at 25°C and pH 7.4. One unit as described above is equivalent to approximately 0.04 units in a glucose dehydrogenase coupled assay at 25°C and pH 7.2 or approximately 0.0035 units in a GO/HRP coupled assay at 37°C and pH 7.2.

Storage and Shipping Information

Storage

4°C