

## Glucose Isomerase from *Streptomyces murinus*

Cat. No. NATE-0900

Lot. No. (See product label)

### Introduction

**Description** In enzymology, a xylose isomerase (EC 5.3.1.5) is an enzyme that catalyzes the interconversion of D-xylose and D-xylulose. This enzyme belongs to the family of isomerases, specifically those intramolecular oxidoreductases interconverting aldoses and ketoses. The isomerase has now been observed in nearly a hundred species of bacteria. Xylose-isomerases are also commonly called glucose-isomerases due to their extensive use in the industry to produce high fructose corn syrup from glucose.

**Applications** Immobilized glucose isomerase produced from *Streptomyces murinus* was used for the isomerization of xylose. Glucose isomerase is used in the food industry to produce high-fructose corn syrup.

**Synonyms** D-xylose isomerase; D-xylose ketoisomerase; D-xylose ketol-isomerase; xylose isomerase; EC 5.3.1.5; Glucose Isomerase

### Product Information

**Source** *Streptomyces murinus*

**EC Number** EC 5.3.1.5

**CAS No.** 9023-82-9

**Activity** 800 U/g

**Unit Definition** One unit converts glucose to fructose at an initial rate of 1  $\mu$ mole per min at standard analytical conditions.

### Storage and Shipping Information

**Storage** Store at 2-8°C