Creative Enzymes®

Native Transketolase from Thermophillic bacteria

Cat. No. NATE-1162

Lot. No. (See product label)

Introduction

Description	Transketolase is highly specific for ketol donor substrates and is stereospecific and enantioselective to hydroxyaldehyde substrates with an (R) configuration. It specifically catalyzes the irreversible transfer of one ketol unit from α-hydroxypyruvic acid to an aldehyde to produce a D-threo (3S,4R)ketose.
Applications	This enzyme is a potential candidate for biocatalysis, suitable for pharmaceutical development / manufacturing. Asymmetric C-C bond formation, ketol donor D-xylulose-5-phosphate may be substituted by hydroxypyruvate; preparation of ketose sugars such as fructose analogs, azasugars and fluorogenic substrates.
Synonyms	Transketolase; EC 2.2.1.1; 9014-48-6; glycolaldehydetransferase; Glycolaldehyde Transferase

Product Information

Source	Thermophillic bacteria
Form	Frozen Liquid
EC Number	EC 2.2.1.1
CAS No.	9014-48-6
Optimum pH	8
Buffer	20mM Tris-HCl(pH 8.0), 1 mM DTT, 5 mM MgCl2, 10 mM NaCl
Unit Definition	One unit is defined as the amount of enzyme producing 1 μmol of D-glyceraldehyde 3-phosphate using ribose-5-phosphate and xylulose-5-phosphate from ribulose-5-phosphate with ribulose-phosphate-3-epimerase per minute.

Storage and Shipping Information

Storage	Store at -20°C