Creative Enzymes®

Native Rabbit Triosephosphate Isomerase

Cat. No. NATE-0712

Lot. No. (See product label)

Introduction

Description	Triose-phosphate isomerase (TPI or TIM) is an enzyme (EC 5.3.1.1) that catalyzes the reversible interconversion of the triose phosphate isomers dihydroxyacetone phosphate and D-glyceraldehyde 3-phosphate. TPI plays an important role in glycolysis and is essential for efficient energy production. TPI has been found in nearly every organism searched for the enzyme, including animals such as mammals and insects as well as in fungi, plants, and bacteria. However, some bacteria that do not perform glycolysis, like ureaplasmas, lack TPI.
Applications	Triosephosphate isomerase has been used in a study to assess molecular characterizations of Cryptosporidium, Giardia, and Enter ocytozoon. Triosephosphate isomerase has also been used in a study to investigate apoptosis of hepat ocellular carcinoma cell lines.
Synonyms	Triose-phosphate isomerase; phosphotriose isomerase; triose phosphoisomerase; triose phosphate mutase; D-glyceraldehyde-3-phosphate ketol-isomerase; TPI; TIM; EC 5.3.1.1; 9023-78-3

Product Information

Species	Rabbit
Source	Rabbit muscle
Form	Type I, ammonium sulfate suspension; Crystalline suspension in 3.2 M (NH4)2SO4 solution, pH 6.0; Type II, lyophilized powder, Sulfate-free, contains EDTA and borate buffer salts.
EC Number	EC 5.3.1.1
CAS No.	9023-78-3
Activity	Type I, > 4,000 units/mg protein; Type II, > 3,500 units/mg protein.
Unit Definition	One unit will convert 1.0 µmole D-glyceraldehyde 3-phosphate to dihydroxyacetone phosphate per min at pH 7.6 at 25°C.

Storage and Shipping Information

Storage	−20°C