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