Creative Enzymes®

# Native Rabbit Triosephosphate Isomerase

*Cat. No. NATE-0712*

*Lot. No.* (See product label)

## Introduction

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| ***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

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| ***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

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| ***Storage*** | −20°C |