Creative Enzymes®

# Endotoxin free Transglutaminase 2 from Human tissue, Recombinant

*Cat. No. NATE-1729*

*Lot. No.* (See product label)

## Introduction

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| ***Description*** | This enzyme belongs to the family of transferases, specifically those transferring phosphorus-containing groups (phosphotransferases) with a phosphate group as acceptor. |
| ***Applications*** | Transglutaminase 2 catalyzes acyl transfer reactions from glutamine residues in proteins or peptides to primary amines, e. g. the formation of ε-(γ-glutamyl) lysine bonds between proteins by transferring the acyl group of a peptide-bound glutamine residue to the primary amino group of a peptide-bound lysine residue. Transglutaminase 2 may also be used for immunoprecipitation. This product is suitable for cell culture use. |
| ***Synonyms*** | transglutaminase; EC 2.3.2.13; 80146-85-6; transglutaminase; Factor XIIIa; fibrinoligase; fibrin stabilizing factor; glutaminylpeptide γ-glutamyltransferase; polyamine transglutaminase; tissue transglutaminase; R-glutaminyl-peptide:amine γ-glutamyl transferase; protein-glutamine γ-glutamyltransferase; TG1 |

## Product Information

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| ***Species*** | Human |
| ***Source*** | Insect cells |
| ***Appearance*** | Liquid |
| ***Form*** | The transglutaminase is supplied in 10 mM Tris-HCl pH 7.2, 150 mM NaCl, 0.5 mM EDTA, 0.5 mM DTT, 10% Glycerol. |
| ***EC Number*** | EC 2.3.2.13 |
| ***CAS No.*** | 80146-85-6 |
| ***Molecular Weight*** | 78 kDa |
| ***Activity*** | > 1500 U/mg [Activity is determined by measuring the rate of fluorescence enhancement after transglutaminase-catalyzed monodansylcadaverine-incorporation into N,N-dimethylated casein according to Lorand et al., Anal. Biochem. 44 (221-231). |
| ***Activators*** | Add 10 mM Ca2+ to activate transglutaminase. |
| ***Endotoxin Level*** | Endotoxin level: < 4.5 EU/mg, sterile filtered using 0.2 micron filter [Bacterial endotoxin level was determined at SGS Institute Fresenius using the kinetic - turbidimetric method]. |
| ***Unit Definition*** | 1 U is defined as the increase in fluorescence intensity of 1 a.u./min (measured on a Cary eclipse fluorescence spectrophotometer, Varian; λex = 332 nm, λem = 500 nm; band filter = 5 nm; detector strength = 600 V; temperature = 37°C, assay volume = 1 ml)]. |

## Usage and Packaging

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| ***Package*** | 250 µg; 1mg |

## *Storage and Shipping Information*

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| ***Storage*** | Store working aliquots at ≤ - 20°C. Avoid repeated freezing and thawing. |