

Product number **T106**
Revision number **RN3.0**

Product Name	Biotinylated human tissue transglutaminase
Synonym	Tissue-type Transglutaminase, TG2, TGase 2, proteinglutamine- γ -glutamyltransferase
Source	Recombinant produced in <i>E. coli</i> .
Quantity	100 μ g, 250 μ g
Molecular Weight	79 kDa (Val224-allele, Kanchan et al., Biochem. J. 2013, 455:261–72)
Activity	<p>> 750 U/mg [Activity is determined by measuring the rate of fluorescence enhancement after His₆-rhTG2-catalyzed monodansylcadaverine-incorporation into N,N-dimethylated casein according to Lorand et al., Anal. Biochem. 44 (221-231)].</p> <p>1 U is defined as the increase in fluorescence intensity of 1 a.u./min (measured on a Cary eclipse fluorescence spectrophotometer, Varian; λ_{ex} = 332 nm, λ_{em} = 500 nm; band filter = 5 nm; detector strength = 600 V; temperature = 37 °C, assay volume = 1 ml)].</p>
Application	<p>His₆-rhTG2 catalyzes acyl transfer reactions from glutamin 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.</p> <p>His₆-rhTG2 may also be used for immunoprecipitation.</p>
Appearance	Liquid.
Purity	> 95% (visually by SDS-PAGE)
Reagents	The Transglutaminase is formulated in 10 mM Sodium Phosphate pH 8.0, 15 mM NaCl. Sample contains 50% glycerol. His ₆ -rhTG2 is a Ca ²⁺ -dependent enzyme.
Activation	Add 10 mM Ca ²⁺ to activate His ₆ -rhTG2.
Storage	Store at -20 °C in working aliquots. Repeated freezing and thawing is not recommended.
Related products	<p>T123 hTG2-Biotin (biotinylated human TG2, rec. prod. in HEK293)</p> <p>T002 Human tissue transglutaminase (hTG2, recombinantly produced in <i>E. coli</i>)</p> <p>A033 Monoclonal antibody to tissue transglutaminase (TG2, Core Domain)</p> <p>A102 TG2-Assay Substance, Abz-APE(CAD-DNP)QEA-OH</p> <p>F002 Tissue Transglutaminase Assay Kit</p>
Release date	29 December 2021
NOTE	INTENDED FOR RESEARCH USE ONLY, NOT FOR USE IN HUMAN, THERAPEUTIC OR DIAGNOSTIC APPLICATIONS.