Product Data Sheet

Product number **T067**
Revision number RN4.0

Product Name	Human tissue transglutaminase, endotoxin free (hTG2)
Synonym	Tissue-type Transglutaminase, TG2, TGase 2, proteinglutamine-γ-glutamyltransferase
Source	Recombinantly produced in insect cells
Quantity	250 µg / 1 mg
Molecular Weight	78 kDa (Val224-allele, Kanchan et al., Biochem. J. 2013, 455:261–72)
Endotoxin Level	< 4.5 EU/mg, sterile filtered using 0.2 micron filter [Bacterial endotoxins according to Ph. Eur. 2.6.14.].
Activity	> 2000 U/mg [Activity is determined by measuring the rate of fluorescence enhancement after His_6-rhTG2-catalyzed monodansylcadaverine-incorporation into N,N-dimethylated casein according to Lorand et al., Anal. Biochem. 44 (221-231)]. 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)].
Application	His_6-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. His_6-rhTG2 may also be used for immunoprecipitation. This product is suitable for cell culture use.
Appearance	(Frozen) liquid.
Formulation	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.
Activation	Add 10 mM Ca^{2+} to activate His_6-rhTG2.
Storage	Store working aliquots at ≤ - 20°C. Avoid repeated freeze-thaw cycles.
Related products	T022 Human tissue transglutaminase A033 Monoclonal antibody to tissue transglutaminase (TG2, Core Domain) Z006 Z-DON-Val-Pro-Leu-OMe
Release date	26 April 2023
NOTE	INTENDED FOR RESEARCH USE ONLY, NOT FOR USE IN HUMAN, THERAPEUTIC OR DIAGNOSTIC APPLICATIONS.