Product Data Sheet

Product number **T039**
Revision number RN4.0

Product Name	Guinea pig liver transglutaminase, recombinant
Synonym	Tissue-type transglutaminase, TG2, TGase 2, GTGase, gpTG, tissue type protein-glutamine-γ-glutamyltransferase
Source	Recombinantly produced in *E. coli*
Quantity	10 U
Molecular Weight	77 kDa
Specific Activity	> 8 U/mg [Activity is determined using the hydroxamate assay according to Folk and Cole, Biochim. Biophys. Acta 122; 244-264, (1966). One unit is defined as the formation of 1 µmol hydroxamate per minute from Z-Gln-Gly-OH and hydroxylamine at pH 6,0 at 37 °C containing 10 mM $CaCl_2$ (L-Glutamic acid γ-monohydroxamate is the standard)].
Description	gpTG2-Gene has been isolated from guinea pig liver cDNA and fused to 6 Histidine-codons at the 5´ end resulting in the N-terminal amino acid sequence MHHHHHHAEDLILE… His_6-rgpTG2 is produced in *E. coli* and purified by ion metal chelating chromatography to more than 95 % purity.
Application	rgpTG2 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.
Appearance	White lyophilized solid.
Reagents	The purified transglutaminase is lyophilized from 10 mM sodium phosphate buffer, 150 mM NaCl, pH 8. Sample contains maltodextrin.
Activation	10 mM $CaCl_2$
Purity	> 95 % (visually by SDS-PAGE)
Storage	Store at -20°C. Avoid repeated freezing and thawing. ***Delivery is possible at ambient temperature***
Reference(s)	Hauser et al., Amino Acids. 2016, 1-17 Wodtke et al., Chembiochem. 2016, DOI: 10.1002/cbic.201600048
Related products	T006 Guinea pig liver transglutaminase (gpTG2, purified from guinea pig liver) A033 Monoclonal antibody to tissue transglutaminase (TG2, Core Domain) T036 Transglutaminase Assay Kit, fluorescent, Casein, Dansylcadaverine
Release date	23 November 2022
NOTE	INTENDED FOR RESEARCH USE ONLY, NOT FOR USE IN HUMAN, THERAPEUTIC OR DIAGNOSTIC APPLICATIONS.