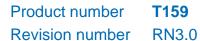
Product Data Sheet





Product Name Pig (sus scrofa) tissue transglutaminase (sTG2)

Synonym Tissue-type Transglutaminase, TG2, TGase 2, proteinglutamine-y-glutamyltransferase

Source Recombinantly produced in *E. coli*

Quantity $250 \mu g / 1 mg$

Molecular Weight 78 kDa

Activity > 750 U/mg [Activity is determined by measuring the rate of fluorescence enhancement after

sTG2-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 =

10 nm; detector strength = 600 V; temperature = 37 °C, assay volume = 1 ml)].

Description sTG2 is based on the NCBI database sequence XM_003359989. It is N-terminally fused to a

hexahistidine-tag resulting in the encoded N-terminal amino acid sequence

MHHHHHHAEDLIL....sTG2 is produced in E. coli and purified by ion metal chelating

chromatography to more than 95 % purity.

Application sTG2 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.

sTG2 may also be used for immunoprecipitation.

Appearance White lyophilized solid.

Reagents The enzyme is lyophilized from 10 mM sodium phosphate buffer, 150 mM NaCl, pH 8.0.

Sample contains maltodextrin.

Reconstitution Add the volume of H₂O the protein is lyophilized from (see Certificate of Analysis) to the vial of

lyophilized powder. Rotate vial gently until solid dissolves. After reconstitution, the solution should be stored frozen in working aliquots. Keep cooled on ice for short term storage.

Activation Add 10 mM Ca²⁺ to activate sTG2.

Purity > 95 % (visually by SDS-PAGE)

Storage Store at -20°C in working aliquots. Repeated freezing and thawing is not recommended.

Delivery is possible at ambient temperature

Related products T002 Human tissue transglutaminase

A102 TG2-Assay Substance, Abz-APE(CAD-DNP)QEA-OH

F002 Tissue Transglutaminase Assay Kit

A014 Polyclonal antibody to human tissue transglutaminase (TG2)

Release date 23 November 2022

NOTE INTENDED FOR RESEARCH USE ONLY, NOT FOR USE IN HUMAN, THERAPEUTIC OR

DIAGNOSTIC APPLICATIONS.