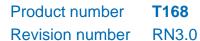
Product Data Sheet





Product Name Human tissue transglutaminase, C230A mutant

(hTG2, Cys230Ala-mutant)

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

Source Recombinantly produced in *E. coli*

Quantity $250 \mu g / 1 mg$

Molecular Weight 78 kDa

Activity > 1500 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).

1 U is defined as the increase in fluorescence intensity of 1 a.u./min (measured on a Cary eclipse fluorescence spectrophotometer, Varian; $\lambda_{ex} = 332$ nm, $\lambda_{em} = 500$ nm; band filter =

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

Description His6-rhTG2-Cys230Ala is based on the TGM2-allele from I.M.A.G.E.-clone IMAGp958L121020

isolated from neuroblastoma cells of the human brain (Val224-allele, Kanchan et al., Biochem.

J. 2013, 455:261-72).

It is N-terminally fused to a hexahistidine-tag resulting in the encoded N-terminal amino acid sequence MAHHHHHAEELV. At position 230 Cysteine has been replaced by Alanine. Please note that numeration corresponds to the wild type protein without hexahistidine-tag. His₆-rhTG2 is produced in *E. coli* and purified by ion metal chelating chromatography to more

than 95% purity.

Application His₆-rhTG2-Cys230Ala may be used for immunoprecipitation.

Appearance White lyophilized solid.

Reagents The Transglutaminase is lyophilized from 10 mM sodium phosphate buffer, 150 mM NaCl,

pH 8.

Reconstitution Add the volume of water specified in the certificate of analysis under aliquotation to the vial of

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

Storage Store at –20 °C in working aliquots.

Repeated freezing and thawing is not recommended.

Delivery at ambient temperature is possible

Reference(s) Stamnes et al., JBC 2010, 285:25402-9

Related products T002 Human tissue transglutaminase

T051 Open tTG™

A033 Monoclonal antibody to tissue transglutaminase (TG2, Core Domain)

Release date 23 November 2022

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

DIAGNOSTIC APPLICATIONS.