

Endotoxin free Transglutaminase 2 from Human tissue, Recombinant

Cat. No. NATE-1729

Lot. No. (See product label)

Introduction

Description

This enzyme belongs to the family of transferases, specifically those transferring phosphorus-containing groups (phosphotransferases) with a phosphate group as acceptor.

Applications

Transglutaminase 2 catalyzes acyl transfer reactions from glutamine 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. Transglutaminase 2 may also be used for immunoprecipitation. This product is suitable for cell culture use.

Synonyms

transglutaminase; EC 2.3.2.13; 80146-85-6; transglutaminase; Factor XIIIa; fibrinolygase; fibrin stabilizing factor; glutaminylpeptide γ -glutamyltransferase; polyamine transglutaminase; tissue transglutaminase; R-glutaminyl-peptide:amine γ -glutamyl transferase; protein-glutamine γ -glutamyltransferase; TG1

Product Information

Species

Human

Source

Insect cells

Appearance

Liquid

Form

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.

EC Number

EC 2.3.2.13

CAS No.

80146-85-6

Molecular Weight

78 kDa

Activity

> 1500 U/mg [Activity is determined by measuring the rate of fluorescence enhancement after transglutaminase-catalyzed monodansylcadaverine-incorporation into N,N-dimethylated casein according to Lorand et al., Anal. Biochem. 44 (221-231).

Activators

Add 10 mM Ca^{2+} to activate transglutaminase.

Endotoxin Level

Endotoxin level: < 4.5 EU/mg, sterile filtered using 0.2 micron filter [Bacterial endotoxin level was determined at SGS Institute Fresenius using the kinetic - turbidimetric method].

Unit Definition

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)].

Usage and Packaging

Package 250 µg; 1mg

Storage and Shipping Information

Storage Store working aliquots at $\leq -20^{\circ}\text{C}$. Avoid repeated freezing and thawing.