Transglutaminase from Cynomolgus, Recombinant

Cat. No. NATE-1726

Lot. No. (See product label)

Introduction

Description Transglutaminases are a family of enzymes that catalyze the posttranslational modification of proteins by inserting an isopeptide bond within or between polypeptide chains. These enzymes catalyze the acyl transfer reaction between the γ-carboxyamide groups of peptide-bound glutamine residues and a variety of primary amines, particularly the ε-amino group of lysine. The resulting crosslink is of great significance, since it is highly stable and also resistant to mechanical and proteolytic degradation.

Applications Labeling, immobilisation, conjugation and modification of proteins.

Synonyms transglutaminase; EC 2.3.2.13; 80146-85-6; transglutaminase; Factor XIIIa; fibrinoligase; 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 Cynomolgus

Source Insect cells

Appearance White lyophilized solid.

Form The purified transglutaminase is lyophilized from 20 mM Tris-HCl pH 7.5, 150 mM NaCl, 1 mM DTT, 1 mM EDTA, contains maltodextrin.

EC Number EC 2.3.2.13

CAS No. 80146-85-6

Molecular Weight 84 kDa (monomer), 168 kDa (homodimer)

Purity > 95 % by SDS-PAGE under reducing conditions

Activity > 2000 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).

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; λex = 332 nm, λem = 500 nm; band filter = 5 nm; detector strength = 600 V; temperature = 37°C, assay volume = 1 ml)].

Usage and Packaging

Package 200 µg

Reconstitution Add at least the volume of H2O the protein is lyophilized from to the vial of lyophilized powder. Rotate vial gently until solid dissolves. After reconstitution the solution should be stored frozen in working aliquots.

Storage and Shipping Information

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

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