Creative Enzymes®

Tissue Transglutaminase from Human, Recombinant

Cat. No. NATE-0921

Lot. No. (See product label)

Introduction

Description	Celiac disease is an enteropathy that is characterized by intestinal lesions of variable severity. Tissue-type transglutaminase (tTG) is believed to be the predominant autoantigen for celiac disease and the corresponding autoantibodies show higher sensitivity and specificity than anti-gliadin antibodies. Highly pure recombinant human tTG is now available to replace the traditionally used tTG fraction from guinea pig. Tissue-type transglutaminase antigens have been specifically modified for improved handling: exchange of an active site amino acid eliminates the protein cross-linking activity of the enzyme, while maintaining the native three-dimensional structure and the enzyme's secondary GTPase activity. This engineering assures reproducible properties of the antigen preparations through the absence of variable and ill-defined covalent aggregates of tTG antigen and host cell proteins.
Applications	Western-Blot
Synonyms	Protein-glutamine gamma-glutamyltransferase 2; EC 2.3.2.13; Tissue transglutaminase; TGase C; TGC; TG(C); Transglutaminase-2; TGase-H; TG2; TGM2

Product Information

Species	Human
Source	Sf9 insect cells
EC Number	EC 2.3.2.13
Molecular Weight	78,018 Da
Purity	Greater than 95% as determined by SDS-PAGE.
Concentration	0.6-1.4 μg/ml
Buffer	TGM2 is supplied in 16mM HEPES buffer pH-8.0, 320mM NaCl, and 20% glycerol.
Function	1. Binds IgA & IgG-type human auto-antibodies. 2. Standard ELISA test (checker-board analysis of positive/negative sera panels, immuno-dot test).

Storage and Shipping Information

Stability	Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°Cfor longer periods of time. Avoid multiple freeze-thaw cycles.