

Human Transglutaminase-2 (TGM2) - Purified

Alternate names:	Protein-glutamine gamma-glutamyltransferase 2, TGase C, TGase-H, Tissue transglutaminase
Catalog No.:	AR19000PU-L
Quantity:	1 mg
Concentration:	1 mg/ml
Background:	<p>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.</p> <p>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.</p>
Uniprot ID:	P21980
NCBI:	NP_004604
GeneID:	7052
Species:	Human
Source:	E. coli
Format:	State: Liquid purified protein Purity: >95% pure as determined by SDS-PAGE Buffer System: 16mM HEPES buffer pH-8.0, 400mM NaCl and 20% Glycerol
Applications:	<p>ELISA: Use at a concentration of 0.6-1.4 µg/ml (depending on the type of ELISA plate and coating buffer).</p> <p>Western-Blot with Monoclonal anti-Hexa-His-tag antibody. Suitable for Biotinylation and Iodination.</p> <p>Immunological Functions:</p> <ol style="list-style-type: none">1. Binds IgA & IgG-type human auto-antibodies.2. Standard ELISA test (checker-board analysis of positive/negative sera panels, immunodot test). <p>Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.</p>
Description:	Recombinant Human Tissue Transglutaminase is produced in E.coli is a non-glycosylated, polypeptide chain having a molecular mass of 78,018 Dalton. tTG is expressed with a

-6xHis tag and purified by proprietary chromatographic techniques. By point mutation of the active center the catalytic transglutaminase activity has been eliminated, resulting in increased stability during storage and coating.

Molecular weight: 78 kDa

Storage:

Store the antigen at 2-8°C for 2-4 weeks or frozen at -20°C for longer.

Avoid multiple freeze-thaw cycles.