

## Human Transglutaminase-2 (TGM2) - Purified

<b>Alternate names:</b>	Protein-glutamine gamma-glutamyltransferase 2, TGase C, TGase-H, Tissue transglutaminase
<b>Catalog No.:</b>	AR19000PU-N
<b>Quantity:</b>	20 µg
<b>Concentration:</b>	1 mg/ml
<b>Background:</b>	<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>
<b>Uniprot ID:</b>	<a href="#">P21980</a>
<b>NCBI:</b>	<a href="#">NP_004604</a>
<b>GeneID:</b>	<a href="#">7052</a>
<b>Species:</b>	Human
<b>Source:</b>	E. coli
<b>Format:</b>	<b>State:</b> Liquid purified protein <b>Purity:</b> >95% pure as determined by SDS-PAGE <b>Buffer System:</b> 16mM HEPES buffer pH-8.0, 400mM NaCl and 20% Glycerol
<b>Applications:</b>	<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><b>Immunological Functions:</b></p> <ol style="list-style-type: none"><li>1. Binds IgA &amp; IgG-type human auto-antibodies.</li><li>2. Standard ELISA test (checker-board analysis of positive/negative sera panels, immunodot test).</li></ol> <p>Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.</p>
<b>Description:</b>	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.