

## OriGene Technologies Inc.

AR19000PU-S

OriGene EU

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## Human Transglutaminase-2 (TGM2) - Purified

Alternate names: Protein-glutamine gamma-glutamyltransferase 2, TGase C, TGase-H, Tissue

transglutaminase

Catalog No.: AR19000PU-S

Quantity: 5 μg Concentration: 1 mg/ml

Background: 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

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aggregates of tTG antigen and host cell proteins.

Uniprot ID: <u>P21980</u>
NCBI: NP 004604

GenelD: 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: ELISA: Use at a concentration of 0.6-1.4 µg/ml (depending on the type of ELISA plate and

coating buffer).

Western-Blot with Monoclonal anti-Hexa-His-tag antibody.

Suitable for Biotinylation and Iodination.

**Immunological Functions:** 

1. Binds IgA & IgG-type human auto-antibodies.

2. Standard ELISA test (checker-board analysis of positive/negative sera panels, immuno-

dot test).

Other applications not tested. Optimal dilutions are dependent on conditions and should

be determined by the user.

**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

For research and in vitro use only. Not for diagnostic or therapeutic work.

Material Safety Datasheets are available at www.acris-antibodies.com or on request.

Acris Antibodies is now part of the OriGene family. Learn more at www.origene.com



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## AR19000PU-S: Human Transglutaminase-2 (TGM2) - Purified

-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.

