

## TGM<sub>2</sub>

## Recombinant Human TGM2/Tissue-type Transglutaminase Sf9 His

Catalog No. CSI10688 Quantity: 5 µg

CSI10689 20 μg CSI10690 1.0 mg

Alternate Names: Protein-glutamine gamma-glutamyltransferase 2, EC 2.3.2.13, Tissue transglutaminase,

TGase C, TGC, TG(C), Transglutaminase-2, TGase-H, TG2, TGM2.

**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.

Tissue Transglutaminase Human Recombinant produced in Sf9 is a 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

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increased stability during storage and coating.

Concentration: 1.2 mg/ml

**GenelD:** 7052

Source: Sf9 insect cells

Molecular Mass: 78,018 Dalton

Formulation: TGM2 is supplied in 16mM HEPES buffer pH-8.0 +320mM NaCl, and 20% glycerol.

**Purity:** > 95.0% as determined by SDS-PAGE analysis

Endotoxin Level: < 0.1 ng/µg of protein

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

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

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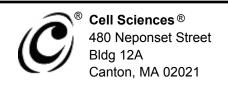
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immuno-dot test).

**Coating Concentration:** 0.6-1.4 μg/ml (depending on the type of ELISA plate and coating buffer).

Suitable for biotinylation and iodination.

**Applications:** Western-Blot with monoclonal anti-hexa-His-tag antibody.



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Application Notes: For Western Blot, use with monoclonal anti-hexa-His-tag antibody. For ELISA, use a

working dilution of 0.6-1.4  $\mu$ g/ml (depending on the type of ELISA plate and coating buffer). Binds IgA and IgG-type human auto-antibodies. Suitable for biotinylation and iodination. The optimal concentration should be determined by the user for each specific

application.

Stable for 4 weeks at 2-4°C. For long term storage, aliquot and store at -20°C. Avoid

repeated freeze-thaw cycles.

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

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