

Tissue Transglutaminase (tTG; expressed in Baculovirus/Sf9)

Antigen Specification

Product Number: 15200

Description:

Human tissue-type transglutaminase (tTG; Transglutaminase C, Transglutaminase H; EC 2.3.2.13). Recombinant antigen for research use or manufacturing only.

Immunological function:

Binds IgA- and IgG-type human auto-antibodies.

Origin:

Recombinant. Expressed by recombinant baculovirus (*Autographa californica* multiple nuclear polyhedrosis virus; AcMNPV) infection of *Spodoptera frugiperda* Sf9 insect cells.

Expression construct:

cDNA coding for the long splice isoform of the human tissue-type transglutaminase fused to a hexahistidine purification tag. By point mutation of the active center the catalytic transglutaminase activity has been eliminated, resulting in increased stability during storage and coating.

Biochemical tests:

SDS-PAGE (purity > 95%); Western blot with i: anti-tTG autoantibody positive sample; ii: monoclonal anti-His-tag antibody.

Calculated molecular weight:

78 kDa

Calculated isoelectric point:

pH 5.3

Immunological tests/Functionality:

Standard ELISA test (checkerboard analysis of negative and positive (anti-endomysium positive celiac disease sera) samples); immunodot analyses with positive/ negative samples.

Recommended buffer/storage and handling conditions:

Recommendations for storage buffer: neutral to slightly alkaline pH and 20% glycerol as cryoprotective agent. Storage conditions: -70°C or below. Repeated freeze/thaw cycles should be avoided.

Coating concentration:

0.6-1.4 µg/mL (depending on the type of ELISA plate and coating buffer). Suitable for labeling of functional groups. Remark: very diverse coating protocols exist in the literature; DIARECT recommends extensive testing in assay development.

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