

## Anti-tissue transglutaminase (expressed in E.coli) tTG

polyclonal, pAB R08

Cat-No: 21411111

100 µg in 100 µl

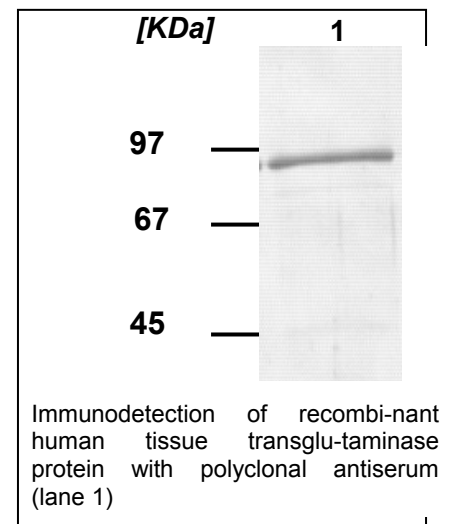
**Introduction:** Tissue transglutaminase is a calcium-activated enzyme which covalently crosslinks the  $\alpha$ -amino group of a peptide bound lysine and the  $\gamma$ -carboxamide group of a peptide-bound glutamine, forming an  $\alpha$ -( $\gamma$ -glutamyl) lysine isopeptide bound (Lorand et al. 1984). The identification of tTG as the main antigen of endomysium antibodies (Dieterich et al. 1997) allows a new diagnostic approach to celiac disease (CD). CD, a genetic, immunologically mediated small bowel enteropathy that causes malabsorption, is one of the more common disorders in Western countries (Martini et al. 2001). A large number of ELISA methods, mainly based on commercially available guinea pig tTG, have been produced, however, these methods have a lower diagnostic accuracy than histologic determination of endomysium antibodies (Dieterich et al. 1998; Sulkanen et al. 1998; Lampasona et al. 1998; Amin et al. 1999). Therefore the use of human tTG as antigen in ELISA is advantageous (Sardy et al. 1999, Osman et al. 2002)

**Product description:** Polyclonal rabbit antiserum which recognizes recombinant human tissue transglutaminase protein in Western blot, ELISA and immunofluorescence. Immunogen is recombinant human tissue transglutaminase, expressed in E.coli (Osman et al. 1999)

**Purity:** undiluted serum (rabbit)

**Stability and storage:** Repeated freezing and thawing should be avoided

**Applications:** The antibody may be used for Western blot (1:1000) and immunofluorescence.



### References

- \*Lorand L, Conrand SM. Mol Cell Biochem 1984; 58: 9-35
- \*Dieterich W, Ehnis T, Bauer M, Donner P, Volta U, Riecken EO, Schupan D. Nature Med 1997; 3: 797-801.
- \*Martini S, Mengozzi G, Aimo G, Pagni R, Sategna-Guidetti C. Clinical Chemistry 47, No. 9, 2001
- Lampasona V, Bazzigaluppi E, Barera G, Bonifacio E. Lancet 1998;352:1192-1193.
- Sardy M, Odenthal U, Karpatis S, Paulsson M Smyth N. Clin Chem 1999; 45:2142-2149.
- Osman AA, Brandsch C, Amin M, Chirido FG, Mothes T. Proceedings of the 14<sup>th</sup> Meeting, Working Group on Prolamin Analysis and Toxicity (1999)

### Warning:

Sodium azide is harmful if swallowed (R22). Keep out of reach of children (S2). Keep away from food, drink, and animal feeding stuff (S13). Wear suitable protective clothing (S36). If swallowed, seek medical advice immediately and show this container or label (S46). Contact with acids liberates very toxic gas (R32). Azide compounds should be flushed with large volumes of water during disposal to avoid deposits in lead or copper plumbing where explosive conditions can develop.

This material is offered for research only. Not for use in human. For in vitro use only. ImmunoTools will not be held responsible for patent infringement or other violations that may occur with the use of our products.

**ImmunoTools** Excellent Quality - Advantageously priced

Gladiolenweg 2; 26169 Friesoythe; Germany  
 phone:+49-(0)4491-400997, fax:+49-(0)4491-400998, [info@immunotools.com](mailto:info@immunotools.com)  
[www.immunotools.com](http://www.immunotools.com)