RDSYSTEMS a biotechne brand

Human Transglutaminase 7/TGM7 Antibody

Antigen Affinity-purified Polyclonal Sheep IgG Catalog Number: AF5426

DESCRIPTION			
Species Reactivity	Human		
Specificity	Detects human Transglutaminase 7/TGM7 in direct ELISAs and Western blots. In direct ELISAs, approximately 5% cross-reactivity with recombinant human (rh) Transglutaminase 3 is observed, and less than 2% cross-reactivity with rhTransglutaminase 2, rhTransglutaminase 4 and recombinant mouse Transglutaminase 2 is observed.		
Source	Polyclonal Sheep IgG		
Purification	Antigen Affinity-purified		
Immunogen	S. frugiperda insect ovarian cell line Sf 21-derived recombinant human Transglutaminase 7/TGM7		
Formulation	 rmulation Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS. 		

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.				
	Recommended Concentration	Sample		
Western Blot	1 µg/mL	See Below		

DATA

We kDa 118- 97- 54- 37-	— — Transglutaminase	Detection of Human Transglutaminase 7/TGM7 by Western Blot. Western blot shows lysates of human thyroid tissue. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Human Transglutaminase 7/TGM7 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5426) followed by HRP- conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Transglutaminase 7/TGM7 at approximately 90 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.		
PREPARATION AND STORAGE				
	nstitution	Reconstitute at 0.2 mg/mL in sterile PBS.		
Ship	ping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C		
Stabi	lity & Storage	 Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution. 		

BACKGROUND

Transglutaminase 7 (TG7), encoded by the TGM7 gene, is also known as protein-glutamine-g-glutamyltransferase Z (Tgase Z) (1). It belongs to the family of Transglutaminases that catalyze the posttranslational modification of proteins via calcium dependent cross-linking reactions (2-4). TG7 is ubiquitously expressed in humans (1). Members of the TGM family have been implicated in a variety of human diseases including neurodegenerative diseases, celiac disease, lamellar ichthyosis, bleeding disorders, cataract formation, atherosclerosis, and others (5).

References:

- 1. Grenard, P. et al. (2001) J. Biol. Chem. 276:33066.
- 2. Gentile, V. et al. (1991) J. Biol. Chem. 266:478.
- 3. Chen, J.S.K. and Mehta K. (1999) Internat. J. Biochem. Cell Biol. 31:817.
- 4. Griffin, M. et al. (2002) Biochem. J. 368:377.
- 5. Kim, S-Y. et al. (2002) Neurochem. Int. 40:85.

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