

DESCRIPTION

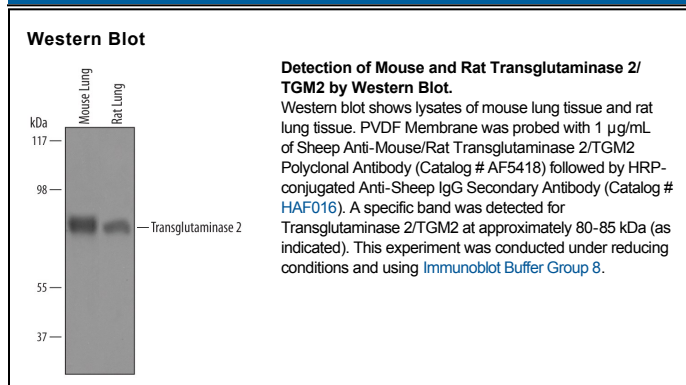
Species Reactivity	Mouse/Rat
Specificity	Detects mouse and rat Transglutaminase 2/TGM2 in direct ELISAs and Western blots. In direct ELISAs, approximately 10% cross-reactivity with recombinant human (rh) TGM2 and rhTGM7 is observed, and less than 1% cross-reactivity with rhTGM3 and rhTGM4 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant mouse Transglutaminase 2/TGM2 Ala2-Ala686 Accession # P21981
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied 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



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	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
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 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 2 (TG2), encoded by the *Tgm2* gene, is also known as tissue Transglutaminase (TG), Transglutaminase C (TGC), and protein-glutamine-γ-glutamyltransferase. It belongs to the family of transglutaminases that catalyze the posttranslational modification of proteins via calcium dependent cross-linking reactions (1-3). In addition to its function in protein cross-linking, TGM2 is also capable of hydrolyzing both GTP and ATP (4) and has intrinsic kinase activity (5). TGM2 has been implicated in a variety of human diseases including celiac disease, inclusion body myositis, atherosclerosis, and neurodegenerative diseases (6, 7).

References:

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2. Chen, J.S.K. and Mehta K. (1999) *Internat. J. Biochem. Cell Biol.* **31**:817.
3. Griffin, M. *et al.* (2002) *Biochem. J.* **368**:377.
4. Lai, T.S. *et al.* (1998) *J. Biol. Chem.* **273**:1776.
5. Mishra, S. *et al.* (2007) *J. Biol. Chem.* **282**:18108.
6. Kim, S-Y. *et al.* (2002) *Neurochem. Int.* **40**:85.
7. Lesort, M. *et al.* (2000) *Prog. Neurobiol.* **61**:439.