

Product Datasheet

Transglutaminase 2/TGM2 Assay Kit (Colorimetric) NBP1-37008

Unit Size: 1 Plate

Storage of components varies. See protocol for specific instructions.

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NBP1-37008**Transglutaminase 2/TGM2 Assay Kit (Colorimetric)**

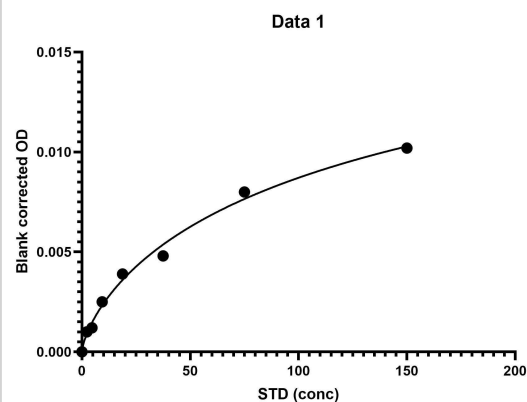
Product Information	
Unit Size	1 Plate
Concentration	Concentration is not relevant for this product. Please see the protocols for proper use of this product.
Storage	Storage of components varies. See protocol for specific instructions.
Conjugate	HRP
Buffer	

Product Description	
Description	The Transglutaminase 2/TGM2 Assay Kit uses biotinylated T26 peptide (Biotin-pepT26) as the first substrate (amine-acceptor/acyl-donor) and an amine-donor/acyl-acceptor as a second substrate. Samples suspected of containing TG2 are incubated with calcium, dithiothreitol (DTT) and Biotin-pepT26 in the wells of microtiter plates containing the amine substrate. In the presence of TG2, the gamma carboxamide of the glutaminyl residue of the biotin-pepT26 is incorporated into the amine substrate to form biotinylated isopeptide bound. The system is coupled to Streptavidin labelled peroxidase (SAv-HRP). SAv-HRP is revealed using H ₂ O ₂ as HRP substrate and tetramethyl benzidine as electron acceptor (chromogen). The kit is shipped on ice and storage at +4 degrees C is recommended. Upon arrival, the DTT, Enzyme Tracer (SAv-HRP), and opr0036 positive control should be stored at -20 degrees C. All the other components of the kit should be kept at +4 degrees C. See manual for more instructions.
Gene ID	7052
Gene Symbol	TGM2
Species	All Species
Reactivity Notes	Use in Porcine reported in scientific publication PMID: 32431691
Specificity/Sensitivity	Measurement of tissue Transglutaminase (tTG/TG2) with low or no interference with other TGs isoforms.
Kit Components	See manual for list of kit components.

Product Application Details	
Applications	Functional
Recommended Dilutions	Functional

Images

ELISA: Transglutaminase 2/TGM2 Assay Kit (Colorimetric) [NBP1-37008] - Standard Curve image from a verified customer review.



Publications

Doki Y, Nakazawa Y, Sukegawa M et al. Piezo1 channel causes lens sclerosis via transglutaminase 2 activation *Experimental eye research* 2023-12-01 [PMID: 37951336]

Panes-Fernandez J, Godoy PA, Gavilan J et al. TG2 promotes amyloid beta aggregates: Impact on ER-mitochondria crosstalk, calcium homeostasis and synaptic function in Alzheimer's disease *Biomedicine & pharmacotherapy = Biomedecine & pharmacotherapie* 2023-03-27 [PMID: 36989728] (Func, All)

Thomas K, Zondler L, Ludwig N et al. Glutamine prevents acute kidney injury by modulating oxidative stress and apoptosis in tubular epithelial cells *JCI insight* 2022-11-08 [PMID: 36107633] (Func, All)

Han MS, Jung YK, Kim GW, Han S Transglutaminase-2 regulates Wnt and FoxO3a signaling to determine the severity of osteoarthritis *Sci Rep* 2020-08-06 [PMID: 32764573]

Chen C, Smith AD, Cheung L et al. Potentiation of IL-4 Signaling by Retinoic Acid in Intestinal Epithelial Cells and Macrophages-Mechanisms and Targets *Front Immunol* 2020-05-05 [PMID: 32431691] (Porcine)

Jung HJ, Han EH, Jang IK et al. Effect of Tissue Transglutaminase on Steroid Resistance in T-Cell Acute Lymphoblastic Leukemia *Anticancer Res.* 2019-11-01 [PMID: 31704844]

Jung HJ, Chen Z, Wang M et al. Calcium blockers decrease the bortezomib resistance in mantle cell lymphoma via manipulation of tissue transglutaminase activities *Blood* 2012-03-15 [PMID: 22294726]

Thomas V, El Alaoui S, Massignon D, Clement S, Simonet F, Quash G. Development and evaluation of a modified colorimetric solid-phase microassay for measuring the activity of cellular and plasma (Factor XIII) transglutaminases. *Biotechnol Appl Biochem.* 43(Pt 3):171-9. 2006-03-01 [PMID: 16313237]

Perez Alea M, Kitamura M, Martin G, Thomas V, Hitomi K, El Alaoui S. Development of an isoenzyme-specific colorimetric assay for tissue transglutaminase 2 cross-linking activity. *Anal Biochem.* 389(2):150-6. 2009-06-15 [PMID: 19318081]





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Products Related to NBP1-37008

NBP2-52009-0.05mg	Recombinant Human Transglutaminase 2/TGM2 His Protein
236-EG-200	EGF [Unconjugated]
AF4376	Transglutaminase 2/TGM2 Antibody [Unconjugated]
210-TA-005	TNF-alpha [Unconjugated]

Limitations

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