TG2 Antibody / Tissue Transglutaminase Antibody (R34793)

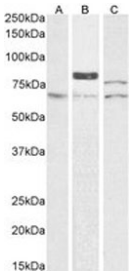
Catalog No.	Formulation	Size
R34793-100UG	0.5 mg/ml in 1X TBS, pH7.3, with 0.5% BSA (US sourced) and 0.02% sodium azide	100 ug

Bulk quote request

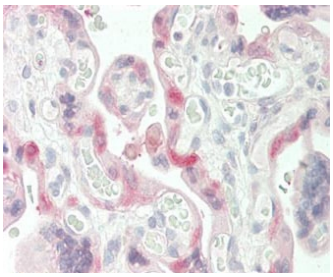
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Goat
Clonality	Polyclonal (goat origin)
Isotype	Goat Ig
Purity	Antigen affinity
Gene ID	7052
Applications	Western Blot : 0.1-0.3ug/ml Immunohistochemistry (FFPE) : 5-10ug/ml Flow Cytometry : 1ug/million cells in 0.1ml ELISA (peptide) LOD : 1:128000
Limitations	This TG2 Antibody / Tissue Transglutaminase Antibody is available for research use only.



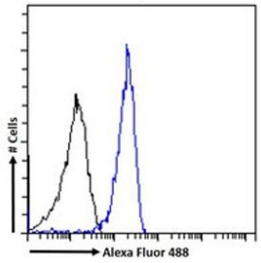
TG2 Antibody Human Placenta WB. Western blot analysis of human placental tissue lysate using TG2 Antibody / Tissue Transglutaminase Antibody. A specific immunoreactive band is detected at approximately 78 kDa, consistent with the predicted molecular weight of Tissue Transglutaminase (TG2). The observed band confirms expression of TG2 in human placental tissue and demonstrates the suitability of this TG2 Antibody for investigating Tissue Transglutaminase expression in studies of placental biology, extracellular matrix remodeling, cell adhesion, and tissue homeostasis.



TG2 Antibody Human Cancer Cell WB. Western blot analysis of human cancer cell lysates using TG2 Antibody / Tissue Transglutaminase Antibody. Lane A: K562 cells; Lane B: A549 cells; Lane C: Caco-2 cells. A predominant immunoreactive band is detected at approximately 78 kDa, consistent with the predicted molecular weight of Tissue Transglutaminase (TG2). Expression is strongest in A549 cells, while K562 and Caco-2 cells also exhibit detectable TG2 at the expected molecular weight. This TG2 Antibody is suitable for investigating Tissue Transglutaminase expression in studies of cancer biology, cell adhesion, extracellular matrix remodeling, and tumor progression.



TG2 Antibody Human Placenta IHC. Immunohistochemical staining of FFPE human placental tissue using TG2 Antibody / Tissue Transglutaminase Antibody following heat-induced epitope retrieval in pH6 citrate buffer. Detection was performed using an alkaline phosphatase secondary system with a red chromogen. Distinct membranous and cytoplasmic staining is observed in trophoblastic cells, while the surrounding stromal tissue exhibits comparatively weaker immunoreactivity. The staining pattern is consistent with the known distribution of Tissue Transglutaminase in placental tissue and demonstrates the utility of this TG2 Antibody for investigating cell adhesion, extracellular matrix remodeling, and placental biology.



TG2 Antibody Human A549 Cell FACS. Flow cytometric analysis of fixed and permeabilized human A549 cells using TG2 Antibody / Tissue Transglutaminase Antibody at 1 ug/10^6 cells in 0.1 ml. The blue histogram represents TG2 antibody staining, while the black histogram represents the naÃ¯ve goat Ig negative control. A pronounced rightward shift of the TG2 antibody signal relative to the control demonstrates specific detection of intracellular Tissue Transglutaminase in A549 cells and supports the suitability of this TG2 Antibody for flow cytometric studies of cell adhesion, extracellular matrix remodeling, and cancer biology.

Description

TG2 Antibody / Tissue Transglutaminase Antibody recognizes tissue transglutaminase (TG2), also known as Transglutaminase 2 (TGM2), a multifunctional enzyme that catalyzes calcium-dependent protein crosslinking while also serving important structural and signaling roles. TG2 is broadly expressed in epithelial, endothelial, stromal, and immune cells and is present within both the cytoplasm and extracellular matrix. Beyond its enzymatic activity, Tissue Transglutaminase functions as a GTP-binding protein and signaling scaffold that regulates cell adhesion, migration, survival, and tissue remodeling. A TG2 Antibody / Tissue Transglutaminase Antibody provides a valuable tool for studying TG2 expression in normal physiology and disease.

Tissue Transglutaminase plays a central role in extracellular matrix organization through interactions with fibronectin, integrins, collagen, and other matrix proteins. These activities influence wound healing, fibrosis, cellular differentiation, apoptosis, and responses to tissue injury. TG2 is also recognized as the principal autoantigen in celiac disease and has been implicated in tumor progression, metastatic behavior, therapeutic resistance, cardiovascular disease, and chronic inflammatory disorders. Diminished or excessive TG2 activity can significantly alter tissue architecture and cellular signaling, making it an important focus of translational research.

TG2 antibodies are suitable for applications including Western blotting, immunohistochemistry, immunofluorescence, flow cytometry, immunoprecipitation, and related protein detection methods when validated for the specific application. Appropriate experimental controls remain important because Tissue Transglutaminase may exist in multiple conformational states and cellular compartments. NSJ Bioreagents provides carefully validated antibodies to support investigations of cell adhesion, extracellular matrix remodeling, fibrosis, autoimmune disease, and cancer biology. A TG2 Antibody / Tissue Transglutaminase Antibody is a valuable research reagent for detecting Tissue Transglutaminase and advancing studies of extracellular matrix organization, cellular signaling, and disease-associated tissue remodeling.

Visit our TGM2 Antibody / Transglutaminase 2 Antibody page to explore additional validated antibodies and research tools for investigating TGM2 expression, extracellular matrix remodeling, cell adhesion, fibrosis, and cancer progression.

Application Notes

Optimal dilution of the TG2 Antibody / Tissue Transglutaminase Antibody should be determined by the researcher.

1. This TG2 antibody is specific for isoform a.

Immunogen

Amino acids NFESDKLKAVKGFR were used as the immunogen for this TG2 antibody. This sequence is specific to isoform a.

Storage

Aliquot and store the TG2 antibody at -20oC.

Alternate Names

TG2 antibody, Tissue Transglutaminase antibody, TGM2 antibody, Transglutaminase 2 antibody, Protein-glutamine Gamma-glutamyltransferase 2 antibody, Transglutaminase C antibody

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