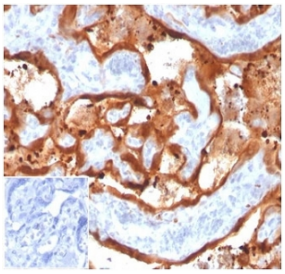
Transglutaminase 2 Antibody (FN Binding Domain) [clone TGM2/3612] (V9619)

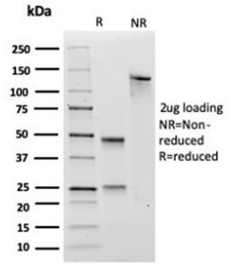
Catalog No.	Formulation	Size
V9619-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9619-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9619SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	TGM2/3612
Purity	Protein A/G affinity
UniProt	P21980
Localization	Cytoplasm, Cell surface
Applications	Flow cytometry: 1-2ug/million cells Immunofluorescence: 1-2ug/ml Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This Transglutaminase 2 Antibody (FN Binding Domain) is available for research use only.



Transglutaminase 2 Antibody (FN Binding Domain) Human Placenta IHC. Immunohistochemical staining of FFPE human placental tissue using Transglutaminase 2 antibody (clone TGM2/3612) following heat-induced epitope retrieval in pH9 Tris-EDTA buffer. Strong membranous and cytoplasmic immunoreactivity is observed in trophoblastic cells outlining the placental villi, consistent with the known extracellular matrix localization of the fibronectin-binding region of Transglutaminase 2. The inset shows the negative control, in which PBS was substituted for the primary antibody, demonstrating minimal background staining. This antibody is well suited for investigating Transglutaminase 2 interactions with fibronectin, cell-matrix adhesion, and extracellular matrix remodeling.



SDS-PAGE analysis of purified, BSA-free Transglutaminase 2 Antibody (FN Binding Domain) (clone TGM2/3612) as confirmation of integrity and purity.

Description

Transglutaminase 2 Antibody (FN Binding Domain) recognizes the fibronectin (FN) binding domain of Transglutaminase 2 (TGM2), a multifunctional enzyme that participates in calcium-dependent protein crosslinking as well as extracellular matrix organization and cell signaling. While TGM2 is best known for its transamidase activity, its interaction with fibronectin is equally important for mediating stable cell-matrix adhesion and maintaining tissue architecture. The fibronectin-binding domain enables Transglutaminase 2 to associate with extracellular matrix proteins independently of its enzymatic activity, supporting cell attachment, migration, and communication with the surrounding microenvironment. A Transglutaminase 2 Antibody (FN Binding Domain) provides a specialized tool for investigating this important functional region of the protein.

Transglutaminase 2 is widely expressed in epithelial cells, endothelial cells, fibroblasts, smooth muscle cells, platelets, and numerous additional tissues. Although predominantly cytoplasmic, the protein is also present on the cell surface and within the extracellular matrix, where it binds fibronectin, integrins, collagen, and other matrix components. These interactions contribute to extracellular matrix stabilization, basement membrane organization, wound healing, tissue repair, and regulation of cell adhesion. Because the fibronectin-binding domain mediates many of these extracellular functions, antibodies directed against this region are valuable for studies examining protein localization, matrix interactions, and adhesion-dependent signaling.

Abnormal Transglutaminase 2 expression or activity has been associated with fibrosis, cancer progression, cardiovascular disease, chronic inflammation, and autoimmune disorders including celiac disease. Increased extracellular TGM2 promotes matrix remodeling, epithelial-mesenchymal transition, tumor invasion, metastatic dissemination, and fibrotic tissue accumulation through enhanced interactions with fibronectin and other extracellular matrix proteins. The fibronectin-binding domain has therefore attracted significant interest as a regulator of tumor microenvironment remodeling and tissue fibrosis. A Transglutaminase 2 Antibody (FN Binding Domain) supports investigations into these disease-associated mechanisms by enabling researchers to study the extracellular functions of TGM2 independently of its catalytic activity.

Transglutaminase 2 antibodies are suitable for applications including Western blotting, immunohistochemistry, immunofluorescence, flow cytometry, immunoprecipitation, and related protein detection methods when validated for the specific application. Domain-specific antibodies are particularly useful for investigating protein-protein interactions involving fibronectin and other extracellular matrix components while complementing studies of total Transglutaminase 2 expression. NSJ Bioreagents provides carefully validated antibodies to support investigations of extracellular matrix biology, cell adhesion, fibrosis, cancer progression, and tissue remodeling. A Transglutaminase 2 Antibody (FN Binding Domain) is a valuable research reagent for detecting the fibronectin-binding region of Transglutaminase 2 and advancing studies of extracellular matrix organization, cell-matrix interactions, 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 Transglutaminase 2 Antibody (FN Binding Domain) should be determined by the researcher.

Immunogen

Recombinant full-length human TGM2 protein was used as the immunogen for the Transglutaminase 2 antibody.

Storage

Aliquot the Transglutaminase 2 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

Transglutaminase 2 (FN Binding Domain) antibody, TGM2 (FN Binding Domain) antibody, Tissue Transglutaminase (FN Binding Domain) antibody, TG2 (FN Binding Domain) antibody, Fibronectin Binding Domain Transglutaminase 2 antibody, Protein-glutamine Gamma-glutamyltransferase 2 (FN Binding Domain) antibody

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