



Datasheet for ABIN5532299

## anti-Transglutaminase antibody (AA 429-458)



[Go to Product page](#)

### 3 Images

#### Overview

Quantity:	400 µL
Target:	Transglutaminase
Binding Specificity:	AA 429-458
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Transglutaminase antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunofluorescence (IF)

#### Product Details

Immunogen:	This Transglutaminase (TGM2) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 429-458 amino acids from the Central region of human Transglutaminase (TGM2).
Isotype:	Ig Fraction
Purification:	This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis

#### Target Details

Target:	Transglutaminase
Abstract:	<a href="#">Transglutaminase Products</a>

## Target Details

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**Background:** Transglutaminases are enzymes that catalyze the crosslinking of proteins by epsilon-gamma glutamyl lysine isopeptide bonds. While the primary structure of transglutaminases is not conserved, they all have the same amino acid sequence at their active sites and their activity is calcium-dependent. TGM2 acts as a monomer, is induced by retinoic acid, and appears to be involved in apoptosis. It has been identified as the autoantigen implicated in celiac disease.

**Molecular Weight:** 77 kDa

**Gene ID:** 7052

**UniProt:** [P21980](#)

## Application Details

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**Application Notes:** For WB starting dilution is: 1:1000

For IF starting dilution is: 1:10~50

For IHC-P starting dilution is: 1:10~50

**Restrictions:** For Research Use only

## Handling

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**Format:** Liquid

**Concentration:** 2 mg/mL

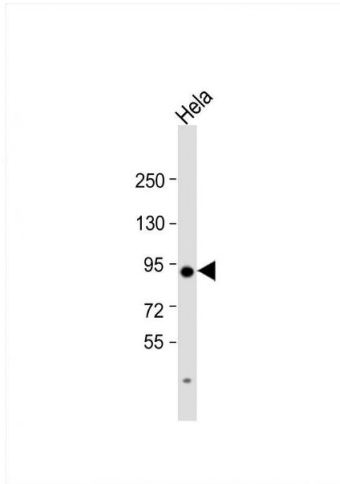
**Buffer:** Supplied in PBS with 0.09 % (W/V) sodium azide.

**Preservative:** Sodium azide

**Precaution of Use:** This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

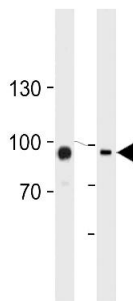
**Storage:** 4 °C, -20 °C

**Storage Comment:** Store at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.



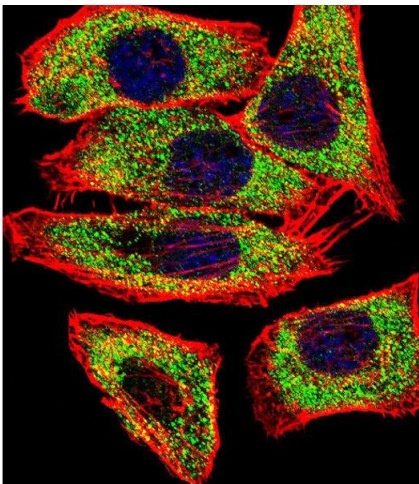
### Western Blotting

**Image 1.** Western Blot at 1:1000 dilution + HeLa whole cell lysate Lysates/proteins at 20 ug per lane.



### Western Blotting

**Image 2.** Western blot analysis in HUVEC, K562 cell line lysates (35ug/lane). This demonstrates the TGM2 antibody detected the TGM2 protein (arrow).



### Immunofluorescence

**Image 3.** Fluorescent confocal image of U251 cell stained with. U251 cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with TGM2 primary antibody (1:25). For secondary antibody, Alexa Fluor 488 conjugated donkey anti-rabbit antibody (green) was used (1:400). Cytoplasmic actin was counterstained with Alexa Fluor 555 (red) conjugated Phalloidin (7units/ml). Nuclei were counterstained with DAPI (blue) (10 ug/ml, 10 min). TGM2 immunoreactivity is localized to Cytoplasm significantly.