

Basic Information

Product Name	Anti-TGM2 Antibody
Gene Name	TGM2
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human, rat
Tested Application	WB, IHC, ICC/IF
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human TGM2 different from the related mouse sequence by three amino acids, and from the related rat sequence by four amino acids.
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	77 kDa
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 (Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.

Storage

12 months from date of receipt, -20°C as supplied.

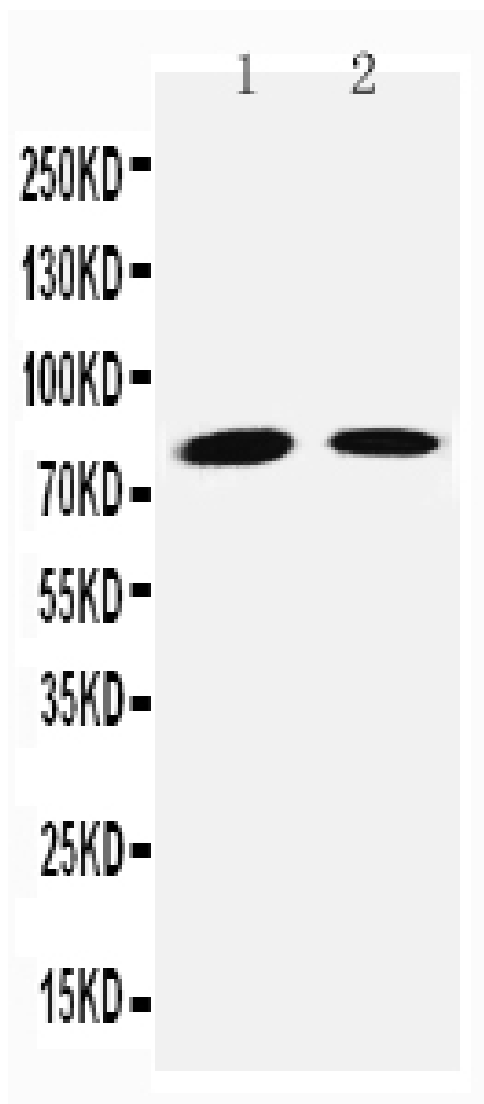
Background Information

Tissue transglutaminase, also called TGC, is a 78-kDa, calcium dependent enzyme of the protein-glutamine gamma-glutamyltransferases family. By fluorescence in situ hybridization(FISH), this gene is mapped in 20q11.23.

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. The protein encoded by this gene acts as a monomer, is

induced by retinoic acid, and appears to be involved in apoptosis. Finally, the encoded protein is the autoantigen implicated in celiac disease.

Selected Validation Data

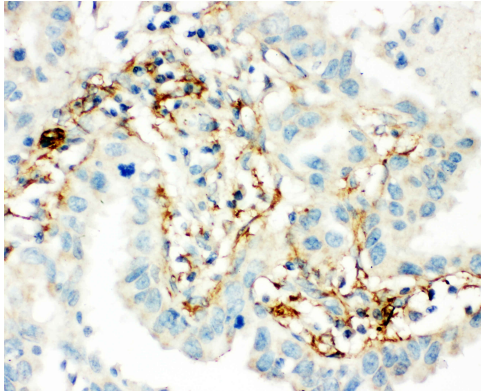


Western blot analysis of TGM2 using anti-TGM2 antibody (BA3135). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: JURKAT whole cell lysates,

Lane 2: HELA whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-TGM2 antigen affinity purified polyclonal antibody (BA3135) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for TGM2 at approximately 77 kDa. The expected band size for TGM2 is at 77 kDa.



IHC analysis of TGM2 using anti-TGM2 antibody (BA3135).

TGM2 was detected in a paraffin-embedded section of human lung cancer tissue. The tissue section was incubated with rabbit anti-TGM2 Antibody (BA3135) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.