

Basic Information

Product Name	Anti-TGM2 Antibody	
Gene Name	TGM2	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC	
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human TGM2, different from the related mouse sequence by five amino acids.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	77 kDa	
Dilution Ratios	Western blot (WB): Immunohistochemistry (IHC): (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.	1:500-2000 1:50-400

Storage

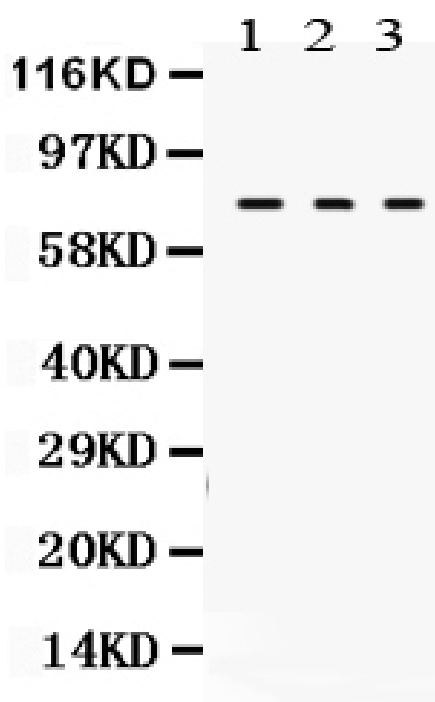
12 months from date of receipt, -20°C as supplied.

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 (PB9448).

The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: Rat Liver tissue lysates,

Lane 2: Rat Ovary tissue lysates,

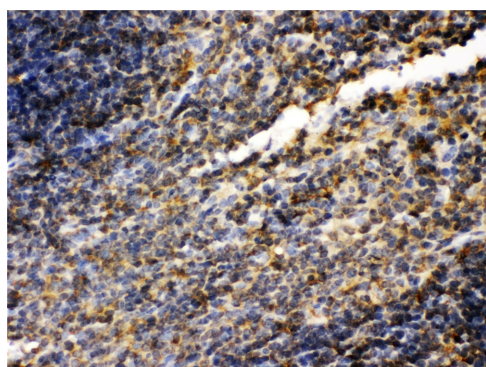
Lane 3: HELA whole cell lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-TGM2 antigen affinity purified polyclonal antibody (PB9448) 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.

Then the membrane was incubated with rabbit anti-TGM2 antigen affinity purified polyclonal antibody (PB9448) 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.

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 (PB9448).

TGM2 was detected in a paraffin-embedded section of mouse spleen tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-TGM2 Antibody (PB9448) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.

TGM2 was detected in a paraffin-embedded section of mouse spleen tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-TGM2 Antibody (PB9448) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.

The tissue section was incubated with rabbit anti-TGM2 Antibody (PB9448) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.

Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.