

# Transglutaminase II (TGM2) Antibody Mouse Monoclonal Antibody [Clone SPM358]

Catalog No	Format	Size
7052-MSM1X-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
7052-MSM1X-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
7052-MSM1X-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes
Western Blot (WB)	2-4ug/ml	

## **Product Details**

Clone	SPM358	
Gene Name	TGM2	
Immunogen	Recombinant full-length human TGM2 protein	
Host	Mouse	
Clonality	Monoclonal	
Isotype / Light Chain	IgG1 / Kappa	
Mol. Weight of Antigen	77-85kDa	
Cellular Localization	Cell membrane, Chromosome, Cytoplasm, Cytosol, Extracellular matrix, Extracellular space, Mitochondrion Nucleus, Perinuclear region, Secreted	
Species Reactivity	Human, Monkey, Mouse, Rabbit, Rat	
Positive Control	Brain, HUVEC cells. Endothelial cells in placenta, Liver, or breast. Smooth muscle cells of any origin (e.g. intestine)	

\*Optimal dilution for a specific application should be determined.

## Product Images for Transglutaminase II (TGM2) Antibody



SDS-PAGE Analysis of Purified Transglutaminase II Mouse Monoclonal Antibody (SPM358). Confirmation of Purity and Integrity of Antibody.



Formalin-fixed, paraffin-embedded human Placenta stained with Transglutaminase II Mouse Monoclonal Antibody (SPM358).



#### **Specificity & Comments**

Recognizes a 77-85kDa protein, identified as cellular or tissue transglutaminase II (TGase II). 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 calciumdependent. 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. The identification of transglutaminase as the main antigen of endomysium antibodies allows a new diagnostic approach to celiac disease (CD), a genetic, immunologically mediated small bowel enteropathy that causes malabsorption. TGase II is implicated in programmed cell death, signal transduction, drug-resistance, cell growth, endocytosis, insulin secretion, cell adhesion, cataract formation, and wound healing.

## **Limitations and Warranty**

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

#### **Supplied As**

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

### **Storage and Stability**

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

#### **Research Areas**

Cardiovascular

