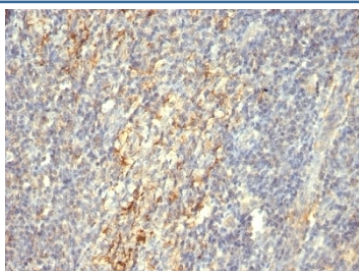


TGM2 Antibody [clone SPM592] (V2891)

Catalog No.	Formulation	Size
V2891-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2891-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2891SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2891IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	SPM592
Purity	Protein G affinity chromatography
UniProt	P21980
Localization	Cytoplasmic and cell surface
Applications	Immunohistochemistry (FFPE) : 0.5-1ug/ml for 30 min at RT
Limitations	This TGM2 antibody is available for research use only.



IHC: Formalin-fixed, paraffin-embedded human tonsil stained with TGM2 antibody (SPM592)

Description

Recognizes a 77-85kDa protein, identified as cellular or tissue transglutaminase II (TGase II, TGM2). 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. 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.

Application Notes

Optimal dilution of the TGM2 antibody should be determined by the researcher.

1. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM Citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 min.
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

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

Storage

Store the TGM2 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).