## Mouse Anti-Transglutaminase II [TGM2/419]: MC0959, MC0959RTU7

Intended Use: For Research Use Only

**Description:** Transglutaminase II catalyzes calcium-dependent post-translational modification of proteins by formation of an isopeptide bond within or between polypeptide chains. It is also known as TGC, tTG, type II-, Gh, cytosolic-, liver-, endothelial-, erythrocyte-, cellular-transglutaminase. Different tissues and cell types express varying amounts of tissue transglutaminase with a markedly high expression in rheumatoid lesions. It is implicated in programmed cell death, signal transduction, drug-resistance, cell growth, endocytosis, insulin secretion, cell adhesion, cataract formation, and wound healing.

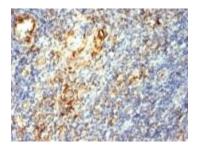
## **Specifications**

| Clone:        | TGM2/419  |      |  |
|---------------|---|------|--|
| Source:       | Mouse   |      |  |
| Isotype:      | IgG2a/k   |      |  |
| Reactivity:   | Human, monkey, rabbit, mouse, rat   |      |  |
| Localization: | Membrane, cytoplasm   |      |  |
| Formulation:  | Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN3) |      |  |
| Storage:      | Store at 2°- 8°C  |      |  |
| Applications: | IHC, Flow Cyt., IF  |      |  |
| Package:      |   |      |  |
| Description   | Catalog No.   | Size |  |

| Description                      | Catalog No. | 5126 |
|----------------------------------|-------------|------|
| Transglutaminase II Concentrated | MC0959      | 1 ml |
| Transglutaminase II Prediluted   | MC0959RTU7  | 7 ml |

## **IHC Procedure**

| Positive Control Tissue:   | Breast cancer   |  |  |
|--|---|--|--|
| Concentrated Dilution:   | 50-200  |  |  |
| Pretreatment:  | Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes |  |  |
|  | using water bath at 95°-99°C  |  |  |
| Incubation Time and Temp:  | 30-60 minutes @ RT  |  |  |
| Detection:   | Refer to the detection system manual  |  |  |
| * Result should be confirmed by an established diagnostic procedure. |   |  |  |
|  |   |  |  |



FFPE human tonsil stained with anti- Transglutaminase II using DAB

## **References:**

- 1. PLA2G5 regulates transglutaminase activity of human IL-4-activated M2 macrophages through PGE2 generation. Yamaguchi M, et al. J Leukoc Biol 100:131-41, 2016.
- 2. Stromal Activation by Tumor Cells: An in Vitro Study in Breast Cancer. Merlino G, et al. Microarrays (Basel) 5:N/A, 2016.
- 3. Tissue transglutaminase contributes to the pathogenesis of preeclampsia and stabilizes placental angiotensin receptor type 1 by ubiquitination-preventing isopeptide modification. Liu C, et al. Hypertension 63:353-61, 2014.
- 4. Molecular cloning of human epidermal transglutaminase cDNA from keratinocytes in culture. Yamanishi, K., et al. Biochem. Biophys. Res. Commun. 175: 906-913, 1991.

Doc. 100-MC0959 Rev. A