

**Catalog No. LF-MA0093**

**MONOCLONAL ANTIBODY**



## Anti-Transglutaminase 2 (2A1)

**Background :** Transglutaminase(TGase) catalyses the crosslink of proteins by forming  $\epsilon$ -( $\gamma$ -glutamyl) lysine isopeptide bonds and requires the binding of  $\text{Ca}^{2+}$  for its activity. In mammals, eight distinct TGase isoenzymes have been identified. Tissue transglutaminase (tTGase), also known as TGase 2, has four distinct domains: N-terminal  $\beta$ -sandwich, catalytic core and two C-terminal  $\beta$ -barrel domains. tTGase may have a role in cell death, cell proliferation, cell differentiation, and receptor-mediated endocytosis. In the Alzheimer's disease brain, the elevated tTGase activity is manifested by polymerization of a number of proteins, including A $\beta$  peptide,  $\beta$ -amyloid precursor protein and the tau protein, with formation of neurofibrillary tangles.

**Immunogen :** Recombinant human protein purified from *E.coli*

**Host :** Mouse

**Clone number :** 2A1

**Isotype :** IgG1, k

**Size :** 100ul

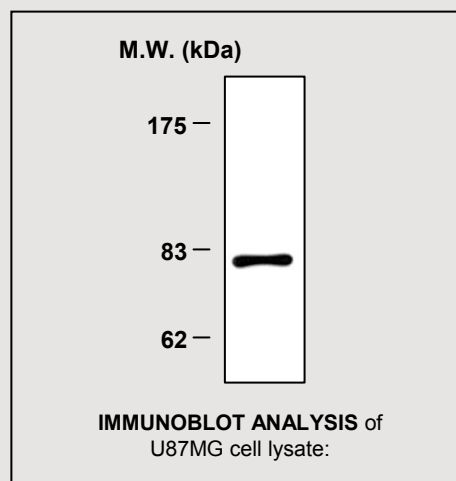
**Composition :** PBS containing 50% glycerol

**Positive control :** U87MG cell lysates

**Storage :** Store for 1 year at  $-20^{\circ}\text{C}$  from date of shipment

### Species cross reactivity

| Human | Mouse | Rat |
|-------|-------|-----|
| +     | -     | -   |



### Applications :

ELISA

Western Blotting (1:2000)

Immunoprecipitation (1-2ul/400ul lysates)

### Background Reference:

- 1) Griffin, M. et al. (2002) *Biochem. J.* 368, 377-396
- 2) Fesus, L. and Piacentini, M. (2002) *Trends. Biochem. Sci.* 27(10), 534-539
- 3) Kim, SY. et al. (2002) *Neurochem. Int.* 40, 85-103

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