

## Bacterial Transglutaminase Monoclonal Antibody

### ORDERING INFORMATION

**Catalog No.:** 90003 (clone 3C7)

**Format:** 100 µg, Protein A-purified, lyophilized, 0.1M Tris, 0.1M glycine, 2% sucrose.

### BACKGROUND

Transglutaminases (Tgases) are multifunctional enzymes that are widely distributed among mammals, invertebrates and plants. *Streptomyces mobaraensis* Tgase is one of the most useful Tgases due to its rather broad substrate specificity and independence of  $\text{Ca}^{2+}$ . The role of TGase in the life-cycle of *Streptomyces* is not fully understood, but it is likely that it functions in protein cross-linking that fortifies the aerial cell wall and the spore envelope. The protein structures of the known bacterial Tgases are quite different from mammalian Tgases in that they lack sequence homology and have smaller molecular masses. Tgase from *S. mobaraensis* is secreted as a 42.5-kDa precursor protein which is then processed by the removal of a 45 amino-acid N-terminal peptide.

### SPECIFICATION SUMMARY

**Antigen:** Recombinant *Streptomyces mobaraensis* transglutaminase.

**Host species:** Mouse.

**Antibody Class:** IgG1.

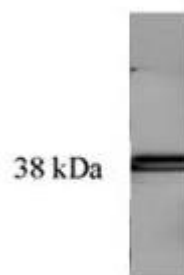
**Preservative:** None.

### SPECIFICITY

This antibody recognizes *Streptomyces* transglutaminase. It does not cross-react with mammalian tissue transglutaminase (Tgase2).

### APPLICATIONS

**Immunoblotting:** use at 1-10ug/ml. A band of ~38kDa is detected.



**ELISA:** use at 1-5ug/ml with *Streptomyces* Tgase on the solid phase. These are recommended concentrations. Enduser should determine optimal concentrations for their applications.

### RECONSTITUTION

Reconstitute in distilled water.

### STORAGE AND STABILITY

This product is stable for at least one (1) year at -20°C to -70°C. Reconstituted product should be stored in appropriate aliquots to avoid repeated freeze-thaw cycles.