

## **High-Temperature Crystallization of Thermostable T1 Lipase**

### **Abstract**

The gene encoding thermostable T1 lipase secreted by *Geobacillus* sp. strain T1 has been overexpressed in a prokaryotic system. Preliminary crystallization was conducted with crystal screen and crystal screen II through a sitting drop vapor diffusion method with 0.5 mg/mL purified T1 lipase at 16 °C. Crystallization at 16 °C using formulation 21 of crystal screen II at 2.5 mg/mL yielded bigger and more defined crystals. Good crystals could easily be obtained as the temperature was increased further while retaining other conditions. In fact, crystallization of T1 lipase is still possible at 60 °C. The ability to form crystals at 60 °C is a new discovery in lipase crystallization.

**Keyword:** thermostable T1 lipase, *Geobacillus* sp. strain T1, crystallization