

Immobilized *Thermomyces lanuginosus* Lipase (TLL)

I1508156

Storage: 2~8°C. Store in the dark. Desiccated.

Introduction:

Lipase from *Thermomyces lanuginosus* (TLL) is a basophilic, single-chain protein and thermostable enzyme. It belongs to the alpha/beta-hydrolase fold family. TLL is roughly spherical and is made up of a central seven-stranded β -parallel sheet with five interconnecting α -helices.

Biochem/physiol Actions:

It participates in catalyzing the hydrolysis of triglycerides at the water-lipid interface and produces mono-, di-glycerides, and free fatty acids. Due to its versatility, this enzyme is applicable in various industries including, detergents, paper, leather, baking, fine chemicals, fuel, and biocatalysts. Lipases catalyze the hydrolysis of triacylglycerols into glycerol and free fatty acids.

Application:

It has high stereoselectivity and a broad substrate spectrum, and can catalyze reactions such as hydrolysis, esterification, transesterification, and ammonolysis. It can be used for the resolution of racemic alcohols and acids, as well as the preparation of chiral compounds.