

## Product Information

### Lipase from *Thermus flavus*

Catalog Number **L3294**  
Storage Temperature 2–8 °C

CAS RN 9001-62-1  
EC 3.1.1.3

#### Product Description

Lipases catalyze the hydrolysis of ester bonds of lipid substrates such as mono, di, and triglycerides to glycerol and fatty acid(s). Lipases from thermophilic bacteria such as *Thermus flavus* have optimal activity in the elevated temperature range of 65–70 °C. Lipases are ubiquitous, being found in mammals, fungi, and bacteria. Lipases are involved in diverse biological processes ranging from routine metabolism of dietary lipids to cell signaling and inflammation.<sup>1,2</sup>

The product is a crude preparation containing a mixture of intracellular lipases and is supplied as a lyophilized powder.

Specific Activity: ≥3 units/g solid

Unit definition: One unit will liberate 1.0 μmole of palmitic acid per minute at pH 8.0 and 65 °C from 4-nitrophenyl palmitate.

#### Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

#### Preparation Instructions

The product is soluble in 50 mM Tris-HCl, pH 8.0, yielding an off-white, slightly hazy solution. The solution is stable for at least one month at 2–8 °C.

#### Storage/Stability

Store the lyophilized product at 2–8 °C. Under these conditions the product is stable for 2 years.

#### References

1. Fuciños, F., et al., *Biotechnol. Prog.*, **21**, 1198-1205 (2005).
2. Saiki, T., et al., *Agr. Biol. Chem.*, **36**, 2357-2366 (1972).

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