

ENZYMES

Lipase

ORIGIN *Chromobacterium viscosum*

CAT# LIPA-70-1461
EC# 3.1.1.3

► SPECIFICATIONS

Appearance	Pale brown (Beige) to off-white powder
Activity	≥2500 U/mg powder at 37°C
Specific Activity	≥2500 U/mg powder at 37°C
Contaminants	NADH Oxidase ≤0.01%
	Catalase ≤0.01%
	Cholesterol Oxidase ≤0.01%

► ASSAY PRINCIPLE

Lipoprotein Lipase (LP) catalyses the following reaction:



The generation of Fatty acid is measured by titration.

► UNIT DEFINITION

One unit of activity is defined as the amount of enzyme that will catalyse the formation of 1.0 micromole of fatty acid per minute at 37°C under the standard assay method conditions.

► APPLICATION

Useful for enzymatic determination of triglyceride.

CHARACTERISTICS

Molecular Weight:	120kDa (pH 3.7) (gel filtration)
Isoelectric Point:	pH 3.7 and 7.3
Optimum pH (Fig. 1):	3.0 to 10.0
pH Stability (Fig. 2):	4.0 to 10.0 (50°C for 60 minutes)
Thermal Stability (Fig. 3):	Stable at 70°C and below (pH 7.0 for 10 hours)

FIGURE 1: OPTIMUM pH

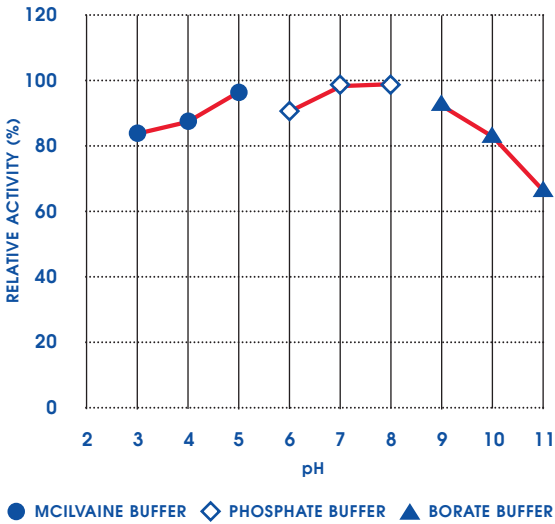


FIGURE 2: pH STABILITY

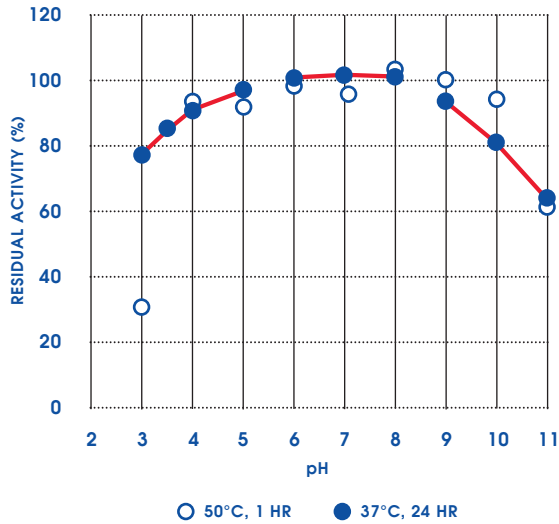


FIGURE 3: THERMAL STABILITY (pH 7.0 FOR 10 HRS.)

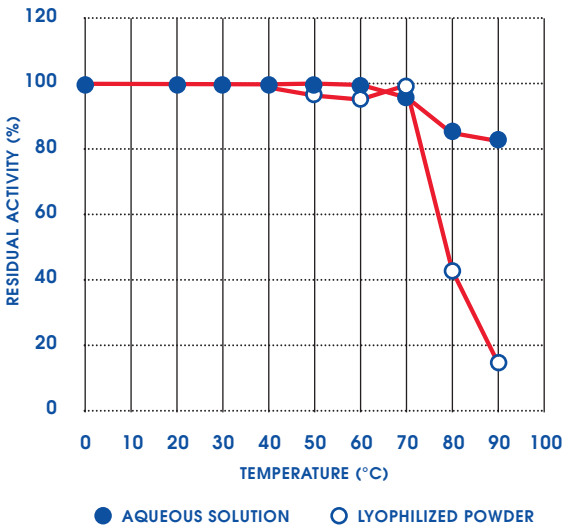


TABLE 1: THE SUBSTRATE SPECIFICITY OF LIPASE

SUBSTRATE	RELATIVE ACTIVITY (%)
Triolein	100%
Tripalmitin	22%
Trimyristin	53%
Trilaurin	103%
Tricaprin	166%
Tricaprylin	312%
Tricaproin	156%
Tributylin	94%
Tripropionin	22%
Triacetin	38%

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