

Lipase from Burkholderia cepacia

Cat. No. EXTZ-903

Lot. No. (See product label)

Introduction

Description

Lipase from Burkholderia cepacia is a triacylglycerol acylhydrolase (EC 3.1.1.3) produced by controlled submerged fermentation and supplied as a white to light yellowish-brown powder with an activity of $\geq 23,000$ units/g. The enzyme catalyzes the hydrolysis of triacylglycerols into glycerol, free fatty acids, and mono- or di-glycerides in aqueous systems, as well as esterification, transesterification, and aminolysis reactions in non-aqueous and low-water media. It remains catalytically active in both water and organic solvents, which makes it one of the most versatile biocatalysts available for chiral synthesis. It is particularly effective in the kinetic resolution of racemic secondary alcohols, carboxylic acids, and esters, and is widely applied in the synthesis of chiral pharmaceutical intermediates, flavor and fragrance compounds, fine chemicals, biodiesel, and structured lipids. The enzyme shows an optimum pH around 8.5, good stability across pH 4.0-11.0, and high catalytic performance at 55-70°C.

Applications

Research

Product Information

Species	Burkholderia cepacia
Source	Microbial fermentation
Appearance	White to light yellowish-brown powder
Form	Powder
EC Number	EC 3.1.1.3
CAS No.	9001-62-1
Activity	$\geq 23,000$ FIP units/g
Isoelectric point	4.0-11.0
Optimum pH	8.5
Thermal stability	Thermally stable up to 55°C
Optimum temperature	55-70°C

Storage and Shipping Information

Storage	Store at 2-8°C in a tightly closed container
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