

# CANDIDA ANTARCTICA LIPASE B, RECOMBINANT

## **TECHNICAL DATA SHEET**



# FBL's Biotech Division - Inspired by life.

Fermase CALB™ 10L is a recombinant Candida antarctica lipase B enzyme expressed in yeast cells.

**Product type** 

Fermase CALB<sup>™</sup> 10L is supplied as formulated; enzyme concentrate equilibrated with buffer and permitted preservatives.

**Application** 

Resolution of chiral alcohols and amines; synthesis of fatty-acid esters; versatile applications in organic synthesis; exhibit good to excellent stereoselectivity.

Description

Yellowish green to green solution. Colour may vary from batch to batch and the colour intensity is not an indication of the product quality.

**Enzyme activity** 

NLT 10000 TBU/mL (Tributyrin hydrolysis). NLT 4500 PLU/mL (Propyl laurate synthesis).

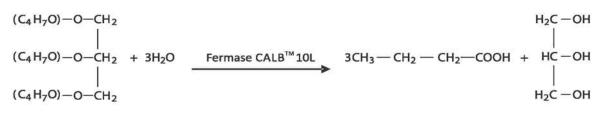
**Unit definition** 

One TBU enzyme unit corresponds to amount of enzyme catalyzing the formation of 1 micromole of butyric acid at  $40^{\circ}$ C, pH 7.5 at 10 % (v/v) tributyrin concentration per minute per ml enzyme in the milieu of 100 mM sodium phosphate buffer.

One PLU enzyme unit corresponds to amount of enzyme catalysing the synthesis of 1 micromole propyl laurate per minute per g of immobilized enzyme at 60°C from lauric acid and 1-propanol.

#### For TBU activity

#### **Reaction schematics**



Tributyrin Butyric acid Glycerol

For PLU activity

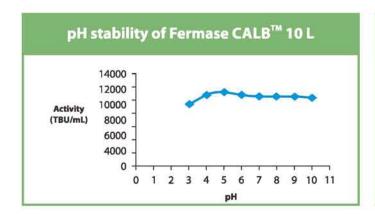
Lauric acid 1-Propanol Propyl laurate

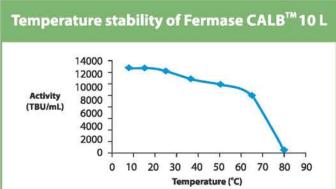


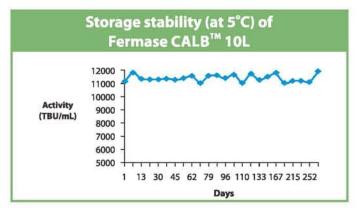
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LIQUID FERMASE CALB™-10L

## Stability profile of Fermase CALB<sup>™</sup>10L







**Advantages** 

Higher activity

Broad application

Higher stability

Storage & product stability

Cool and dry conditions are recommended for storage. The recommended temperature for storing is between 5°C to 8°C. When stored under these conditions, the product will maintain its declared activity for at least 12 months.

Safety

Fermase CALB<sup>™</sup> 10L is very safe to handle, as it does not generate any aerosols. Avoid direct contact with skin and eyes. Avoid forming aerosols, wash contaminated clothing and ensure sufficient ventilation.

Material support data

- Technical data sheet
- Certificate of analysis

Material safety data sheet

Protocols for assay methods

**Packing size** 

Minimum pack size: 1 kg Bulk pack size



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