

Candida antarctica Lipase B biocatalyst, Recombinant



IMMOBILIZED
BIOCATALYST CALB_{TA} 10000

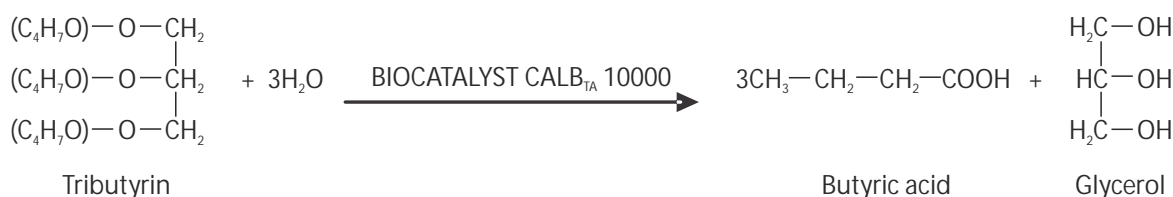
TECHNICAL DATA SHEET

BIOCATALYST CALB_{TA} 10000 is an immobilized enzyme catalyst of *Candida antarctica* lipase B expressed in yeast cells.

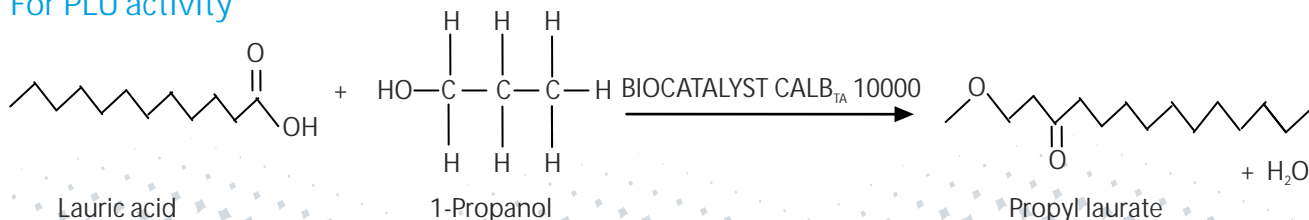
Product type	BIOCATALYST CALB _{TA} 10000 is based on covalent immobilization on polyacrylate beads.
Application	Resolution of chiral alcohols and amines; Synthesis of fatty-acid esters; Versatile applications in organic synthesis; Exhibit good to excellent stereo selectivity.
Description	Creamish white to white coloured regularly shaped beads with defined particle size distribution. Colour may vary from batch to batch and the colour intensity is not an indication of the product quality.
Particle size	300-500 µm > 95.0 %
Enzyme activity	NLT 2500 TBU units per g dry weight (Tributyryl hydrolysis) NLT 10000 PLU units per g dry weight (Propyl laurate synthesis)
Dry weight	NLT 80 %
Unit definition	<p>One TBU enzyme unit corresponds to amount of enzyme catalyzing the formation of 1 µmole of butyric acid at 40°C, pH 7.5 at 10% (v/v) Tributyrin concentration per minute per mL enzyme in the milieu of 100 mM sodium phosphate buffer.</p> <p>One PLU enzyme unit corresponds to synthesis of 1 µmol propyl laurate per minute per g of immobilized enzyme at 60°C from lauric acid and 1-propanol.</p>

Reaction schematics

For TBU activity



For PLU activity

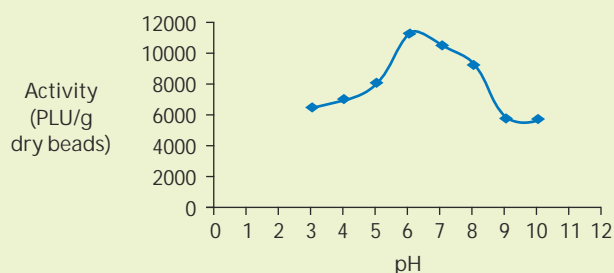


Candida antarctica Lipase B biocatalyst, Recombinant

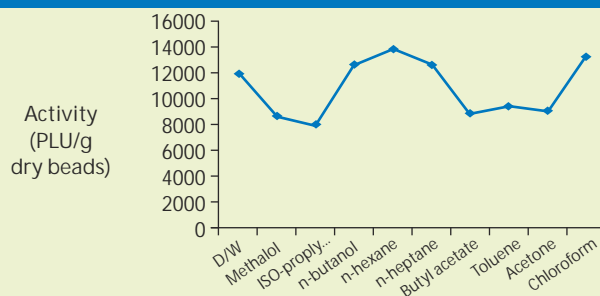


BIOCATALYST CALB_{TA} 10000 Profile

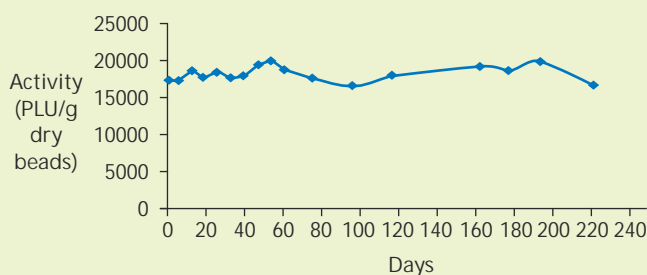
pH stability of BIOCATALYST CALB_{TA} 10000



Solvent stability of BIOCATALYST CALB_{TA} 10000



Storage stability (at 5°C) of BIOCATALYST CALB_{TA} 10000



Advantages

- Higher activity
- Good stability

Storage & Product stability

Cool and dry conditions are recommended for storage. The recommended temperature for storing is below 10°C. When stored under these conditions, the product will maintain its declared activity for at least 12 months.

Safety

BIOCATALYST CALB_{TA} 10000 is very safe to handle, as it does not generate any aerosols. However, avoid raising dust. Avoid contact with skin and eyes. Take up the spilled dust by mechanical means. Avoid forming aerosols, wash contaminated clothing and ensure sufficient ventilation.

Material support data

- Technical data sheet
- Material safety data sheet
- Certificate of analysis
- Protocol for assay methods (PLU activity / TBU activity)

Packing size

- Minimum pack size : 1kg
- Bulk pack size : 25kg



Manufactured by :

Fermenta Biotech Limited

DIL Complex, Ghodbunder Road, Thane (West) - 400 610, Maharashtra, India.
Tel. : +91 22 6798 0888 ♦ Fax : +91 22 6798 0899
www.fermentabiotech.com ♦ Email : info@fermentabiotech.com