

Candida antarctica lipase B biocatalyst, Recombinant



IMMOBILIZED
BIOCATALYST CALB_{TA} 10000

TECHNICAL DATA SHEET

BIOCATALYST CALB_{TA} 10000 is a recombinant *Candida antarctica* lipase B enzyme expressed in *Pichia pastoris* cells

Product type **BIOCATALYST CALB_{TA} 10000** is based on covalent immobilization on polyacrylate beads.

Application Hydrolysis of esters, Synthesis of esters and amides, Transesterification reaction. Chirally selective for alcohols and amines, exhibits good to excellent stereoselectivity. Versatile application in organic chemistry.

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 %

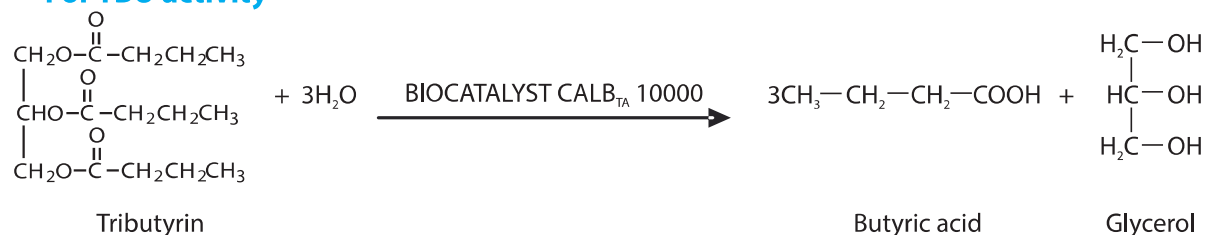
Enzyme activity NLT 2,500 TBU units per g dry weight (Tributyryn hydrolysis)
NLT 10,000 PLU units per g dry weight (Propyl laurate synthesis)

Dry weight NLT 95 %

TBU definition Amount of enzyme catalyzing the formation of 1 μmol 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 pH 7.5

Reaction schematics

For TBU activity



For PLU activity

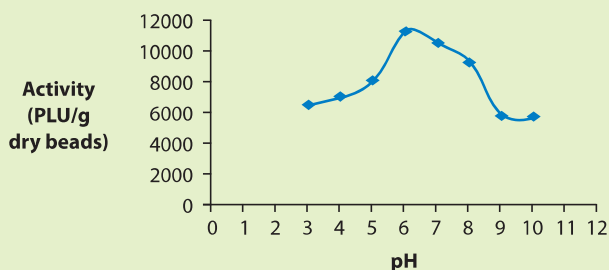


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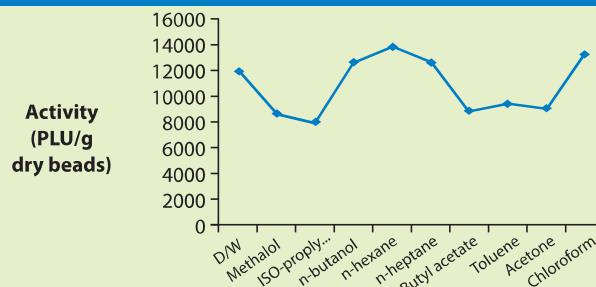


BIOCATALYST CALB_{TA} 10000 Profile

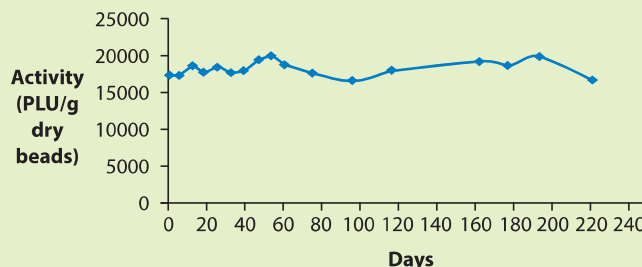
pH stability of BIOCATALYST CALB_{TA} 10000



Solvent stability of BIOCATALYST CALB_{TA} 10000



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



Advantages

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

Packing size

- Minimum pack size : 1kg
- Bulk pack size : 10kg



Manufactured by :

Fermenta Biotech Limited

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