

Esterase PL

Carboxylesterase
EC 3.1.1.1

Description: Esterase for enantioselective splitting of esters from primary alcohols and short-chain carbonic acids. Esterification of primary alcohols with short- and long-chain carbonic acids.

Reaction: carboxylic ester + H₂O $\xrightarrow{\text{PL}}$ alcohol + carboxylate

Origin: porcine liver

Application: organic synthesis

Activity: > 500 U/g
(method: ASA Spezialenzyme GmbH,
substrate: glycerol tributyrat, pH 7.0, temperature 37°C)

Specific activity: > 1.5 U/mg

Esterification:

- 1) primary alcohols with short- and long-chain carbonic acids
examples: propanol + oleic acid
octanol + phthalic acid / tartaric acid
- 2) secondary alcohols with short-chain carbonic acids:
example: menthol + acetic acid
- 3) amino acids with short-chain carbonic acids:
example: cysteine + acetic acid

Parameters of reaction: pH optimum 6.0
temperature optimum 60°C

Order-No.: 2410

Form of delivery: light brown powder

Storage: -20°C