Creative Enzymes®

Carboxylesterase 1 isoform b from Human, Recombinant

Cat. No. NATE-1915

Lot. No. (See product label)

Introduction

Description Carboxylesterase 1 is a member of a large multigene carboxylesterase family. These enzymes are responsible for the hydrolysis of ester- and amide-bond-containing drugs such as cocaine and heroin. They also hydrolyze long-chain fatty acid esters and thioesters. This enzyme is known to hydrolyze aromatic and aliphatic esters and is necessary for cellular cholesterol esterification. It may also play a role in detoxification in the lung and/or protection of the central nervous system from ester or amide compounds.

Applications Delivers high catalytic activity, ideal for robust high-throughput screening assays including drug-drug interaction studies, and pharmacokinetic studies for evaluating pro-drugs and non-CYP pathways of elimination.

Synonyms EC 3.1.1.1; Esterase Isoenzyme 1; 9016-18-6; carboxylesterase; ali-esterase; B-esterase; monobutyrase; cocaine esterase; procaine esterase; methylbutyrase; vitamin A esterase; butyryl esterase; carboxyesterase; carboxylate esterase; carboxylic esterase; methylbutyrate esterase; triacetin esterase; carboxyl ester hydrolase; butyrate esterase; methylbutyrase; α-carboxylesterase; propionyl esterase; nonspecific carboxylesterase; esterase D; esterase B; esterase A; serine esterase; carboxylic acid esterase; cocaine esterase

Product Information

Species Human

Source Baculovirus infected BTI insect cells

Form Liquid

EC Number EC 3.1.1.1

CAS No. 9016-18-6

Activity ≥500 units/mg protein

Concentration 5 mg/ml

Unit Definition One unti will hydrolyze one nanomole of 4-nitrophenyl acetate per minute at pH 7.4 at 37°C.

Storage and Shipping Information

Storage at -70°C