

Carboxylesterase 1 isoform c from Human, Recombinant

Cat. No. NATE-1916

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

≥ 1000 units/mg protein

Concentration

5 mg/ml

Unit Definition

One unit 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