

Native Porcine Catechol-O-methyl Transferase

Cat. No. NATE-0148

Lot. No. (See product label)

Introduction

Description

Catechol-O-methyltransferase (COMT; EC 2.1.1.6) is one of several enzymes that degrade catecholamines such as dopamine, epinephrine, and norepinephrine. In Humans, catechol-O-methyltransferase protein is encoded by the COMT gene. As the regulation of catecholamines is impaired in a number of medical conditions, several pharmaceutical drugs target COMT to alter its activity and therefore the availability of catecholamines. COMT was first discovered by the biochemist Julius Axelrod in 1957.

Synonyms

catechol O-methyltransferase; COMT; COMT I; COMT II; S-COMT (soluble form of catechol-O-methyltransferase); MB-COMT (membrane-bound form of catechol-O-methyltransferase); catechol methyltransferase; catecholamine O-methyltransferase; EC 2.1.1.6; 9012-25-3; Pyrocatechol-O-methyl Transferase; S-Adenosyl-L-methionine:catechol O-methyltransferase

Product Information

Species

Porcine

Source

Porcine liver

Form

Lyophilized powder containing phosphate buffer and dithiothreitol

EC Number

EC 2.1.1.6

CAS No.

9012-25-3

Activity

> 150 units/mg protein

Unit Definition

One unit will produce 1.0 nanomole of total O-methylated products from 3,4 dihydroxyacetophenone per hour at pH 7.6 at 37°C. Previous radioactive assay unit definition: One unit will catalyze the methylation of 1.0 nanomole of protocatechuic acid per hr at pH 7.9 at 37°C using S-adenosyl-L-[methyl-14C]methionine as the methyl donor. (~6 radioactive units equal one new unit).