Creative Enzymes®

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).