

## 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).