Creative Enzymes®

Native Rhodococcus rhodochrous Epoxide Hydrolase

Cat. No. NATE-0449

Lot. No. (See product label)

Introduction

Description	Epoxide hydrolase (also known as epoxide hydratase) functions in detoxification during drug metabolism. It converts epoxides to trans-dihydrodiols, which can be conjugated and excreted from the body. Epoxides result from the degradation of aromatic compounds. Deficiency in this enzyme in patients receiving aromatic-type anti-epileptic drugs such as phenytoin is reported to lead to DRESS syndrome. Epoxides are significant as cytochrome P450 oxidase metabolites of unsaturated carbon-carbon bonds, but are also mutagenic. Epoxide hydrolase is present in large quantity on endoplasmic reticulum.
Synonyms	EC 3.3.2.3; epoxide hydratase; epoxide hydratase (ambiguous); microsomal epoxide hydratase; epoxide hydrase; microsomal epoxide hydrase; arene-oxide hydratase (ambiguous); benzo[a]pyrene-4,5-oxide hydratase; benzo (a)pyrene-4,5-epoxide hydratase; aryl epoxide hydrase (ambiguous); cis-epoxide hydrolase; mEH; 9048-63-9

Product Information

Source	Rhodococcus rhodochrous
Form	lyophilized powder, beige
EC Number	EC 3.3.2.3
CAS No.	9048-63-9
Activity	> 0.5 U/g
Unit Definition	1 U corresponds to the amount of enzymes which hydrolizes 1 μmol (S)-NEPC [(2S,3S)-trans-3-phenyl-2-oxiranylmethyl-4-nitrophenyl carbonate] per minute at pH 8.0 and 25°C

Storage and Shipping Information

Storage	−20°C