

alkene monooxygenase

Cat. No. EXWM-0875

Lot. No. (See product label)

Introduction

Description

This bacterial binuclear non-heme iron enzyme is a multicomponent enzyme complex comprising an oxygenase, a reductase, and a Rieske-type ferredoxin. The enzyme from the bacterium *Xanthobacter* sp. strain Py2 contains an additional small protein of unknown function that is essential for activity. In general, the enzyme oxygenates C2 to C6 aliphatic alkenes, although enzymes from different organisms show different substrate range. With propene as substrate, the stereospecificity of the epoxypropane formed is 95% (R) and 5% (S).

Synonyms

alkene epoxygenase; etnABCD (gene names); amoABCDE (gene names)

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 1.14.13.69

CAS No.

63439-50-9

Reaction

propene + NADH + H⁺ + O₂ = 1,2-epoxypropane + NAD⁺ + H₂O

Notes

This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

Storage and Shipping Information

Storage

Store it at +4 °C for short term. For long term storage, store it at -20 °C~-80 °C.