Creative Enzymes®

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 stereospecifity 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 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.