

cyclohexanone monooxygenase

Cat. No. EXWM-0822

Lot. No. (See product label)

Introduction

Description

A flavoprotein (FAD). In the catalytic mechanism of this enzyme, the nucleophilic species that attacks the carbonyl group is a peroxyflavin intermediate that is generated by reaction of the enzyme-bound flavin cofactor with NAD(P)H and oxygen. This enzyme is able to catalyse a wide range of oxidative reactions, including enantioselective Baeyer-Villiger reactions, sulfoxidations, amine oxidations and epoxidations.

Synonyms

cyclohexanone 1,2-monooxygenase; cyclohexanone oxygenase;
cyclohexanone:NADPH:oxygen oxidoreductase (6-hydroxylating, 1,2-lactonizing)

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 1.14.13.22

CAS No.

52037-90-8

Reaction

cyclohexanone + NADPH + H⁺ + O₂ = hexano-6-lactone + NADP⁺ + 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.