

unspecific monooxygenase

Cat. No. EXWM-0906

Lot. No. (See product label)

Introduction

Description

A group of P-450 heme-thiolate proteins, acting on a wide range of substrates including many xenobiotics, steroids, fatty acids, vitamins and prostaglandins; reactions catalysed include hydroxylation, epoxidation, N-oxidation, sulfoxidation, N-, S- and O-dealkylations, desulfation, deamination, and reduction of azo, nitro and N-oxide groups. Together with EC 1.6.2.4, NADPH-hemoprotein reductase, it forms a system in which two reducing equivalents are supplied by NADPH. Some of the reactions attributed to EC 1.14.15.3, alkane 1-monooxygenase, belong here.

Synonyms

microsomal monooxygenase; xenobiotic monooxygenase; aryl-4-monooxygenase; aryl hydrocarbon hydroxylase; microsomal P-450; flavoprotein-linked monooxygenase; flavoprotein monooxygenase; substrate, reduced-flavoprotein:oxygen oxidoreductase (RH-hydroxylating or -epoxidizing)

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 1.14.14.1

CAS No.

9038-14-6

Reaction

$\text{RH} + [\text{reduced NADPH-hemoprotein reductase}] + \text{O}_2 = \text{ROH} + [\text{oxidized NADPH-hemoprotein reductase}] + \text{H}_2\text{O}$

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.