Creative Enzymes®

heme oxygenase (biliverdin-producing)

Cat. No. EXWM-0915

Lot. No. (See product label)

Introduction

Description This mammalian enzyme participates in the degradation of heme. The terminal oxygen atoms that are incorporated into the carbonyl groups of pyrrole rings A and B of biliverdin are derived from two separate oxygen molecules. The third oxygen molecule provides the oxygen atom that converts the α-carbon to CO. The enzyme requires NAD(P)H and EC 1.6.2.4, NADPH-hemoprotein reductase. cf. EC 1.14.15.20, heme oxygenase (biliverdin-producing, ferredoxin).

Synonyms ORP33 proteins; haem oxygenase (ambiguous); heme oxygenase (decyclizing) (ambiguous); heme oxidase (ambiguous); haem oxidase (ambiguous); heme oxygenase (ambiguous); heme,hydrogen-donor:oxygen oxidoreductase (α-methene-oxidizing, hydroxylating)

Product Information

Form Liquid or lyophilized powder

EC Number EC 1.14.14.18

CAS No. 9059-22-7

Reaction protoheme + 3 [reduced NADPH-hemoprotein reductase] + 3 O2 = biliverdin + Fe2+ + CO + 3 [oxidized NADPH-hemoprotein reductase] + 3 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 ℃.