

## 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  $\alpha$ -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 ( $\alpha$ -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 O<sub>2</sub> = biliverdin + Fe<sup>2+</sup> + CO + 3 [oxidized NADPH-hemoprotein reductase] + 3 H<sub>2</sub>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.