

## 3 $\alpha$ ,7 $\alpha$ ,12 $\alpha$ -trihydroxy-5 $\beta$ -cholestanoyl-CoA 24-hydroxylase

Cat. No. EXWM-1103

Lot. No. (See product label)

### Introduction

#### Description

Requires ATP. The reaction in mammals possibly involves dehydrogenation to give a 24(25)-double bond followed by hydration. However, in amphibians such as the Oriental fire-bellied toad (*Bombina orientalis*), it is probable that the product is formed via direct hydroxylation of the saturated side chain of (25R)-3 $\alpha$ ,7 $\alpha$ ,12 $\alpha$ -trihydroxy-5 $\beta$ -cholestan-26-oate and not via hydration of a 24(25) double bond. In microsomes, the free acid is preferred to the coenzyme A ester, whereas in mitochondria, the coenzyme A ester is preferred to the free-acid form of the substrate.

#### Synonyms

trihydroxycoprostanoyl-CoA oxidase; THC-CoA oxidase; THCA-CoA oxidase; 3 $\alpha$ ,7 $\alpha$ ,12 $\alpha$ -trihydroxy-5 $\beta$ -cholestanoyl-CoA oxidase; 3 $\alpha$ ,7 $\alpha$ ,12 $\alpha$ -trihydroxy-5 $\beta$ -cholestan-26-oate 24-hydroxylase

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 1.17.99.3

#### CAS No.

119799-47-2

#### Reaction

(25R)-3 $\alpha$ ,7 $\alpha$ ,12 $\alpha$ -trihydroxy-5 $\beta$ -cholestan-26-oyl-CoA + H<sub>2</sub>O + acceptor = (24R,25R)-3 $\alpha$ ,7 $\alpha$ ,12 $\alpha$ ,24-tetrahydroxy-5 $\beta$ -cholestan-26-oyl-CoA + reduced acceptor

#### 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.