

3-ketosteroid 9a-monooxygenase

Cat. No. EXWM-0742

Lot. No. (See product label)

Introduction

Description The enzyme is involved in the cholesterol degradation pathway of several bacterial pathogens, such as

Mycobacterium tuberculosis. It is a two-component system consisting of a terminal oxygenase (KshA) and a ferredoxin reductase (KshB). The oxygenase contains a Rieske-type iron-sulfur center and non-heme iron. The reductase component is a flavoprotein containing an NAD-binding domain and a plant-type iron-sulfur cluster. The product of the enzyme is unstable, and spontaneously converts to 3-hydroxy-9,10-

seconandrost-1,3,5(10)-triene-9,17-dione.

Synonyms KshAB; 3-ketosteroid 9α -hydroxylase

Product Information

Form Liquid or lyophilized powder

EC Number EC 1.14.13.142

 $\textit{Reaction} \qquad \text{androsta-1,4-diene-3,17-dione} + \text{NADH} + \text{H+} + \text{O2} = 9\alpha - \text{hydroxyandrosta-1,4-diene-3,17-dione} + \text{NAD+}$

+ 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

Store it at +4 °C for short term. For long term storage, store it at -20 °C∼-80 °C.

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