Creative Enzymes®

3-ketosteroid 9α-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
Reaction	androsta-1,4-diene-3,17-dione + NADH + H+ + O2 = 9α-hydroxyandrosta-1,4-diene-3,17-dione + 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

Storage	Store it at +4 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.