Creative Enzymes®

25/26-hydroxycholesterol 7α-hydroxylase

Cat. No. EXWM-0926

Lot. No. (See product label)

Introduction

Description	A P-450 (heme-thiolate) protein. Unlike EC 1.14.14.26, 24-hydroxycholesterol 7α-monooxygenase, which is specific for its oxysterol substrate, this enzyme can also metabolize the oxysterols 24,25-epoxycholesterol, 22-hydroxycholesterol and 24-hydroxycholesterol, but to a lesser extent. The direct electron donor to the enzyme is EC 1.6.2.4, NADPH-hemoprotein reductase.
Synonyms	25-hydroxycholesterol 7α-monooxygenase; CYP7B1; CYP7B1 oxysterol 7α-hydroxylase; 27-hydroxycholesterol 7-monooxygenase; 27-hydroxycholesterol 7α-hydroxylase; cholest-5-ene-3β,25-diol,NADPH:oxygen oxidoreductase (7α-hydroxylating); 25-hydroxycholesterol 7α-hydroxylase

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 1.14.14.29
CAS No.	149316-80-3
Reaction	(1) cholest-5-ene-3β,25-diol + [reduced NADPH-hemoprotein reductase] + O2 = cholest-5-ene-3β,7α,25-triol + [oxidized NADPH-hemoprotein reductase] + H2O; (2) (25R)-cholest-5-ene-3β,26-diol + [reduced NADPH-hemoprotein reductase] + O2 = (25R)-cholest-5-ene-3β,7α,26-triol + [oxidized NADPH-hemoprotein reductase] + 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 ℃.