

steroid 17 α -monooxygenase

Cat. No. EXWM-0916

Lot. No. (See product label)

Introduction

Description

Requires NADPH and EC 1.6.2.4, NADPH-hemoprotein reductase. A microsomal hemoprotein that catalyses two independent reactions at the same active site - the 17 α -hydroxylation of pregnenolone and progesterone, which is part of glucocorticoid hormones biosynthesis, and the conversion of the 17 α -hydroxylated products via a 17,20-lyase reaction to form androstenedione and dehydroepiandrosterone, leading to sex hormone biosynthesis (EC 4.1.2.30, 7 α -hydroxyprogesterone aldolase). The ratio of the 17 α -hydroxylase and 17,20-lyase activities is an important factor in determining the directions of steroid hormone biosynthesis towards biosynthesis of glucocorticoid or sex hormones.

Synonyms

steroid 17 α -hydroxylase; cytochrome P-450 17 α ; cytochrome P-450 (P-450 17 α ,lyase); 17 α -hydroxylase-C17,20 lyase; CYP17; CYP17A1 (gene name)

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 1.14.14.19

CAS No.

9029-67-8

Reaction

a C21-steroid + [reduced NADPH-hemoprotein reductase] + O₂ = a 17 α -hydroxy-C21-steroid + [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 °C for short term. For long term storage, store it at -20 °C~-80 °C.