Creative Enzymes®

aurachin C monooxygenase/isomerase

Cat. No. EXWM-0825

Lot. No. (See product label)

Introduction

Description	The aurachin C monooxygenase from the bacterium Stigmatella aurantiaca accepts both NADH and NADPH as cofactor, but has a preference for NADH. It catalyses the initial steps in the conversion of aurachin C to aurachin B. The FAD-dependent monooxygenase catalyses the epoxidation of the C2-C3 double bond of aurachin C, which is followed by a semipinacol rearrangement, causing migration of the farnesyl group from C3 to C4.
Synonyms	auaG (gene name); aurachin C monooxygenase

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 1.14.13.222
Reaction	aurachin C + NAD(P)H + H+ + O2 = 4-hydroxy-2-methyl-3-oxo-4-[(2E,6E)-farnesyl]-3,4-dihydroquinoline 1-oxide + NAD(P)+ + H2O (overall reaction); (1a) aurachin C + NAD(P)H + H+ + O2 = 2-hydroxy-1a-methyl-7a-[(2E,6E)-farnesyl]-1a,2-dihydrooxireno[2,3-b]quinolin-7(7aH)-one + NAD(P)+ + H2O; (1b) 2-hydroxy-1a-methyl-7a-[(2E,6E)-farnesyl]-1a,2-dihydrooxireno[2,3-b]quinolin-7(7aH)-one = 4-hydroxy-2-methyl-3-oxo-4-[(2E,6E)-farnesyl]-3,4-dihydroquinoline 1-oxide
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 ℃.