Creative Enzymes®

tyrosine N-monooxygenase

Cat. No. EXWM-0849

Lot. No. (See product label)

Introduction

Description	A heme-thiolate protein (P-450). This enzyme is involved in the biosynthesis of the cyanogenic glucoside dhurrin in sorghum, along with EC 1.14.13.68, 4-hydroxyphenylacetaldehyde oxime monooxygenase and EC 2.4.1.85, cyanohydrin β-glucosyltransferase. Some 2-(4-hydroxyphenyl)-1-nitroethane is formed as a side product.
Synonyms	tyrosine N-hydroxylase; CYP79A1

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 1.14.13.41
CAS No.	159447-19-5
Reaction	L-tyrosine + 2 O2 + 2 NADPH + 2 H+ = (Z)-[4-hydroxyphenylacetaldehyde oxime] + 2 NADP+ + CO2 + 3 H2O (overall reaction); (1a) L-tyrosine + O2 + NADPH + H+ = N-hydroxy-L-tyrosine + NADP+ + H2O; (1b) N-hydroxy-L-tyrosine + O2 + NADPH + H+ = N,N-dihydroxy-L-tyrosine + NADP+ + H2O; (1c) N,N-dihydroxy-L-tyrosine = (Z)-[4-hydroxyphenylacetaldehyde oxime] + CO2 + 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 ℃.