Creative Enzymes®

sphingolipid 4-desaturase

Cat. No. EXWM-0979

Lot. No. (See product label)

Introduction

Description	The enzyme, which has been characterized from plants, fungi, and mammals, generates a trans double bond at position 4 of sphinganine bases in sphingolipids. The preferred substrate is dihydroceramide, but the enzyme is also active with dihydroglucosylceramide. Unlike EC 1.14.19.29, sphingolipid 8-desaturase, this enzyme does not contain an integral cytochrome b5 domain and requires an external cytochrome b5. The product serves as an important signalling molecules in mammals and is required for spermatide differentiation.
Synonyms	dehydroceramide desaturase

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 1.14.19.17
Reaction	a dihydroceramide + 2 ferrocytochrome b5 + O2 + 2 H+ = a (4E)-sphing-4-enine ceramide + 2 ferricytochrome b5 + 2 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 ℃.