Creative Enzymes®

4-hydroxysphinganine ceramide fatty acyl 2-hydroxylase

Cat. No. EXWM-0968

Lot. No. (See product label)

Introduction

Description	The enzyme, characterized from yeast and mammals, catalyses the hydroxylation of carbon 2 of long- or very-long-chain fatty acids attached to (4R)-4-hydroxysphinganine during de novo ceramide synthesis. The enzymes from yeast and from mammals contain an N-terminal cytochrome b5 domain that acts as the direct electron donor to the desaturase active site. The newly introduced 2-hydroxyl group has R-configuration. cf. EC 1.14.18.7, dihydroceramide fatty acyl 2-hydroxylase.
Synonyms	FA2H (gene name); SCS7 (gene name)

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 1.14.18.6
Reaction	a phytoceramide + 2 ferrocytochrome b5 + O2 + 2 H+ = a (2'R)-2'-hydroxyphytoceramide + 2 ferricytochrome b5 + 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 ℃.