senecionine N-oxygenase

Cat. No. EXWM-0700

Lot. No. (See product label)

Introduction

Description	A flavoprotein. NADH cannot replace NADPH. While pyrrolizidine alkaloids of the senecionine and monocrotaline types are generally good substrates (e.g. senecionine, retrorsine and monocrotaline), the enzyme does not use ester alkaloids lacking an hydroxy group at C-7 (e.g. supinine and phalaenopsine), 1,2-dihydro-alkaloids (e.g. sarracine) or unesterified necine bases (e.g. senkirkine) as substrates. Senecionine N-oxide is used by insects as a chemical defense: senecionine N-oxide is non-toxic, but it is bioactivated to a toxic form by the action of cytochrome P-450 oxidase when absorbed by insectivores.
Synonyms	senecionine monooxygenase (N-oxide-forming); SNO

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 1.14.13.101
CAS No.	220581-68-0
Reaction	senecionine + NADPH + H+ + O2 = senecionine N-oxide + NADP+ + 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 ℃.