Creative Enzymes®

spermine oxidase

Cat. No. EXWM-1543

Lot. No. (See product label)

Introduction

Description	The enzyme from Arabidopsis thaliana (AtPAO1) oxidizes norspermine to norspermidine with high efficiency. The mammalian enzyme, encoded by the SMOX gene, is a cytosolic enzyme that catalyses the oxidation of spermine at the exo (three-carbon) side of the tertiary amine. No activity with spermidine. Weak activity with N1-acetylspermine. A flavoprotein (FAD). Differs in specificity from EC 1.5.3.13 (N1-acetylpolyamine oxidase), EC 1.5.3.14 (polyamine oxidase (propane-1,3-diamine-forming)), EC 1.5.3.15 (N8-acetylspermidine oxidase (propane-1,3-diamine-forming) and EC 1.5.3.17 (non-specific polyamine oxidase).
Synonyms	PAOh1/SMO; PAOh1 (ambiguous); AtPAO1; AtPAO4; SMO; mSMO; SMO(PAOh1); SMO/PAOh1; SMO5; mSMOmu

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 1.5.3.16
Reaction	spermine + O2 + H2O = spermidine + 3-aminopropanal + H2O2
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 ℃.