Creative Enzymes®

Recombinant Mycolicibacterium smegmatis Lactate 2-monooxygenase

Cat. No. EXWM-0617

Lot. No. (See product label)

Introduction

Description In enzymology, a lactate 2-monooxygenase (EC 1.13.12.4) is an enzyme that catalyzes the chemical reaction (S)-lactate + O2 ⇌ acetate + CO2 + H2O Thus, the two substrates of this enzyme are (S)-lactate and O2, whereas its 3 products are acetate, CO2, and H2O. This enzyme belongs to the family of oxidoreductases, specifically those acting on single donors with O2 as oxidant and incorporation of two atoms of oxygen into the substrate (oxygenases). The oxygen incorporated need not be derived from O with incorporation of one atom of oxygen (internal monooxygenases o internal mixed-function oxidases).

Product Information

Species	Mycolicibacterium smegmatis
Source	E.coli
Form	Lyophilized powder
EC Number	EC 1.13.12.4
CAS No.	9028-72-2
Purity	Greater than 85% as determined by SDS-PAGE.
Activity	Not detected
Buffer	Tris/PBS-based buffer, 6% Trehalose, pH 8.0
Reaction	(S)-lactate + O2 = acetate + 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 at -20°C/-80°C upon receipt, aliquoting is necessary for mutiple use. Avoid repeated freeze-thaw cycles.