Creative Enzymes®

L-Glutamate Oxidase from Streptomyces sp., Recombinant

Cat. No. NATE-0393

Lot. No. (See product label)

Introduction

Description	In enzymology, a L-glutamate oxidase is an enzyme that catalyzes the chemical reaction:L-glutamate + O2 + H2O↔ 2-oxoglutarate + NH3 + H2O2. The 3 substrates of this enzyme are L-glutamate, O2, and H2O, whereas its 3 products are 2-oxoglutarate, NH3, and H2O2. This enzyme belongs to the family of oxidoreductases, specifically those acting on the CH-NH2 group of donors with oxygen as acceptor. It employs one cofactor, FAD.
Synonyms	L-glutamate oxidase; EC 1.4.3.11; 39346-34-4; glutamate (acceptor) dehydrogenase; glutamate oxidase; glutamic acid oxidase; glutamic dehydrogenase (acceptor); L-glutamic acid oxidase

Product Information

Species	Streptomyces sp.
Source	E. coli
Form	lyophilized powder
EC Number	EC 1.4.3.11
CAS No.	39346-34-4
Activity	> 5.0 unit/mg solid
Unit Definition	One unit will form 1.0 μmole of α-ketoglutaric acid from L-glutamic acid per min at pH 7.4 at 30°C.

Storage and Shipping Information

Storage	2-8°C