

## 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 + O<sub>2</sub> + H<sub>2</sub>O ⇌ 2-oxoglutarate + NH<sub>3</sub> + H<sub>2</sub>O<sub>2</sub>. The 3 substrates of this enzyme are L-glutamate, O<sub>2</sub>, and H<sub>2</sub>O, whereas its 3 products are 2-oxoglutarate, NH<sub>3</sub>, and H<sub>2</sub>O<sub>2</sub>. This enzyme belongs to the family of oxidoreductases, specifically those acting on the CH-NH<sub>2</sub> 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** One unit will form 1.0 μmole of α-ketoglutaric acid from L-glutamic acid per min at pH 7.4 at 30°C.

**Definition**

### Storage and Shipping Information

**Storage** 2-8°C