Creative Enzymes
Diagnostic Enzymes

Glutamate Oxidase

Product Information

Cat#	DIA-435
Description	A FAD-dependent glutamate oxidase with high specificity for glutamate. It is produced using genetic recombination technology to ensure consistent quality.
Form	Freeze dried powder
Activity	≥ 15 U/mg lyophilizate
Unit Definition	One unit (U) is defined as the amount of enzyme which produces 1 μmol of hydrogen peroxide per min at 30 °C and pH 7.4 under the conditions described below.
Enzyme Commission Number	EC 1.4.3.11
pH Stability	6.0–8.5
Michaelis Constant	3.2×10^{-4} M (L-glutamate)
Optimum pH	6.0–8.0
Optimum temperature	40–50 °C
Thermal stability	Below 55 °C
Applications	Glutamate can be quantified by colorimetry using glutamate oxidase and Trinder's reagent. This product can also be immobilized on an electrode to continuously measure glutamate using the electrode method.
Appearance	Light yellow to yellow lyophilizate
Molecular Weight	ca. 115 kDa (Gel filtration)
Notes	Expiration date: Liquid: stable at 37 °C for at least two weeks Powder: stable at 30 °C for at least one month

Tel: 1-631-562-8517 1-516-512-3133
Email:info@creative-enzymes.com
Fax:1-631-938-8127
45-1 Ramsey Road, Shirley, NY 11967, USA