

Lactate Oxidase, Enzyme Activity

Catalog	Unit
TBP0032-1KU	1000 U
TBP0032-5KU	5000 U

Preparation and Specification

Appearance: Yellowish amorphous powder, lyophilized

Activity: Grade III 80U/mg-solid or more

Contaminants: Pyruvate oxidase $\leq 1.0 \times 10^{-3}\%$

Cholesterol oxidase $\leq 1.0 \times 10^{-3}\%$

Uricase $\leq 1.0 \times 10^{-3}\%$

Glucose oxidase $\leq 1.0 \times 10^{-3}\%$

L-Lactate : oxygen oxidoreductase (EC 1.13.12.4)

L-Lactate + O₂ —————▶ Pyruvate + H₂O₂

Properties

Stability: Stable at -20°C for at least One year

Molecular weight: approx. 160,000 (by gel filtration)

Isoelectric point: 4.3±0.2

Michaelis constant: 1.0×10^{-3} M (L-Lactate)

Inhibitors: Fe⁺⁺⁺, SDS

Optimum pH: 7.5

Optimum temperature: 35-40°C

pH Stability: 4.0-9.8 (25°C, 16hr)

Thermal stability: below 50°C (pH 7.0, 10min)

Applications

This enzyme is useful for enzymatic determination of L-lactate.

For research use only