

Choline oxidase, Enzyme Activity

Catalog	Unit
TBP0009-1KU	1000 U
TBP0009-5KU	5000 U

Preparation and Specification

Appearance: Yellowish amorphous powder, lyophilized

Activity: GradIII 10U/mg-solid or more (containing approx. 20% of stabilizers)

Contaminant: Catalase $\leq 1.0 \times 10^2\%$

Stabilizers: EDTA, BSA, amino acids (glycine, sodium glutamate, etc.)

Properties

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

Molecular weight: approx. 95,000

Isoelectric point: 4.1 ± 0.1

Michaelis constants: $2.84 \times 10^{-3}\text{M}$ (Choline), $5.33 \times 10^{-3}\text{M}$ (Betaine aldehyde)

Structure: One mol of FAD is covalently bound to mol of the enzyme

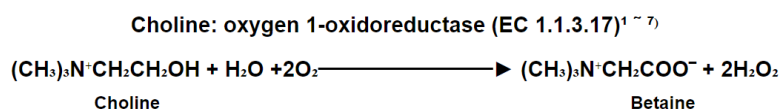
Inhibitors: p-Chloromercuribenzoate, Cu^{++} , Co^{++} , Hg^{++} , Ag^+

Optimum pH: 8.0–8.5

Optimum temperature: $40\text{--}45^\circ\text{C}$

pH Stability: pH 7.0–9.0 (30°C , 2 hr)

Thermal stability: below 37°C (pH 7.5, 10min)



Applications

This enzyme is useful for enzymatic determination of phospholipids when coupled with phospholipase D and for choline esterase-activity in clinical analysis.

For research use only