

Xanthine oxidase, Enzyme Activity

Catalog	Unit
TBP0045-50U	50 U
TBP0045-100U	100 U

Preparation and Specification

Appearance: Reddish brown amorphous powder, lyophilized

Activity: GradeII 10U/mg-solid or more

Contaminants: Catalase $\leq 5\%$

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

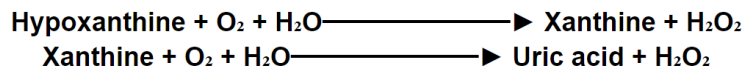
Uricase $\leq 1.0 \times 10^{-3}\%$

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

Purine-nucleoside phosphorylase $\leq 5.0 \times 10^{-3}\%$

Stabilizers: Sodium glutamate, BSA

Xanthine: oxygen oxidoreductase (EC 1.1.3.22)



Properties

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

Molecular weight: approx. 160,000

Isoelectric point: 4.0 ± 0.1

Michaelis constants: $4.5 \times 10^{-5}\text{M}$ (Xanthine), $7.6 \times 10^{-5}\text{M}$ (Hypoxanthine)

Inhibitors: Reducing agents, Hg^{++} , Ag^+ , MIA

Optimum pH: 7.5-8.0

Optimum temperature: 65°C

pH Stability: pH 6.5-9.0 (25°C , 15hr)

Thermal stability: below 55°C (pH 8.0, 30min)

Applications

This enzyme is useful for enzymatic determination of inorganic phosphorus, 5'-nucleotidase and adenosine deaminase when coupled with Purine-nucleoside phosphorylase (PNP-311) and uricase (UAO-201, UAO-211).

For research use only