

ASOD

L-Ascorbate oxidase

L-Ascorbate : oxygen oxidoreductase (EC 1.10.3.3)

from *Cucumber*

Reaction Equation



Specification

Specific Activity

IU/mg protein

Specifications

>100 units

Assay Procedure

I. Spectrophotometric Method

Wavelength ; 265 nm, Light path length ; 1 cm,
Temperature ; 25°C

Pipette the following reagents into a cuvette

3.00 mL Phosphate buffer (0.05 mol/L, pH 5.6)
containing EDTA (1 mmol/L)
0.03 mL L-Ascorbate (10 mmol/L)
0.02 mL ASOD (about 0.5 IU/mL)

II. Calculation

$$\frac{\Delta A/\text{min} \cdot V \cdot D}{14.8 \cdot d \cdot v} = \text{IU/mL}$$

$\Delta A/\text{min}$ = The change in absorbance at 265 nm/minute

V = Total volume of reaction mixture (3.05 mL)

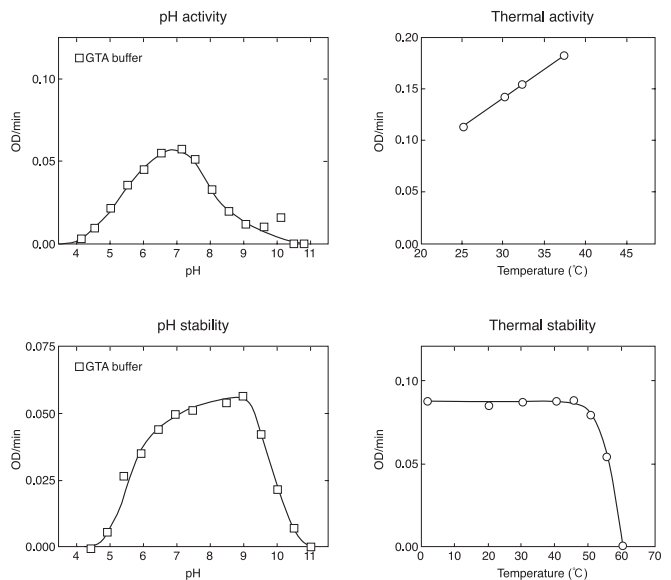
D = Enzyme dilution factor

14.8 = mM extinction coefficient of Ascorbate
($\text{L} \cdot \text{mmol}^{-1} \cdot \text{cm}^{-1}$)

d = Light path length (1 cm)

v = Volume of enzyme sample (0.02 mL)

Reference Data



Preparation and storage

Product Code : ASOD-03

Lyophilized powder (contains no ammonium sulfate)

.....below -20°C

IU per 1 mg powder is approximately 150 units.

OYC No./Package

OYC No.	Package
46420003	200 units
46421003	800 units
46422003	4,000 units
46424903	Bulk

(Research reagent use only, not for medical use.)



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