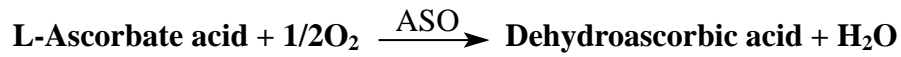


# ASCORBATE OXIDASE

## L-Ascorbate:oxygen oxidoreductase

### Reaction:



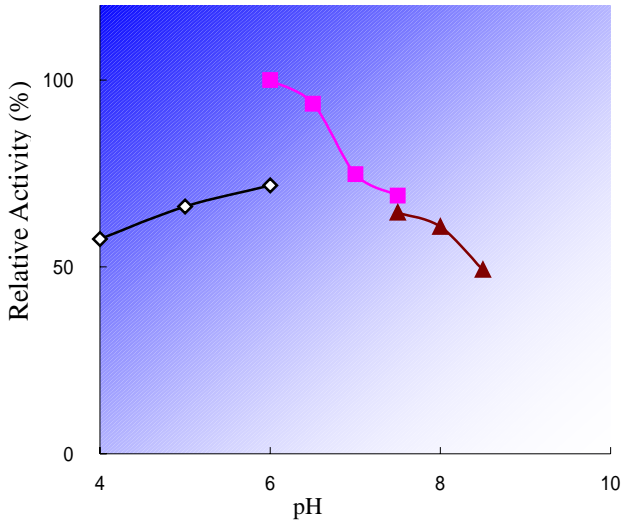
### Product Description

<b>Appearance :</b>	White powder, lyophilized
<b>Source :</b>	Plant
<b>Enzyme Comission Number :</b>	EC 1.10.3.3
<b>CAS Number :</b>	9029-44-1
<b>Storage Temperature</b>	-20
<b>Specific Activity :</b>	400U/mg protein
<b>Unit definition :</b>	One unit causes the decrease of one micromole of ascorbic acid per min at pH 5.6 at 30 .

### Properties

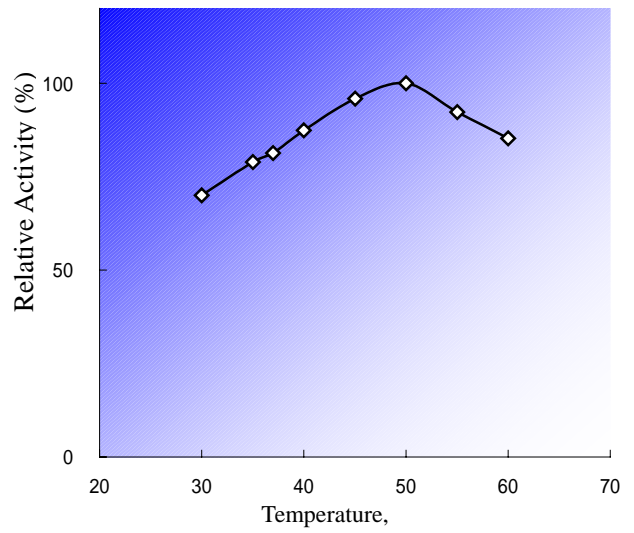
<b>Molecular Weight :</b>	67kDa (SDS-PAGE)
<b>Michaelis constant:</b>	$3.6 \times 10^{-4}\text{M}$
<b>Optimum pH:</b>	6.0
<b>Optimum temperature:</b>	50
<b>pH Stability :</b>	6.0~11.0 (25 , 20hr)
<b>Thermal Stability :</b>	< 50 (pH7.0, 30min)
<b>Inhibitors :</b>	$\text{Ag}^+, \text{Hg}^{2+}$

**Fig. 1 pH Optimum**



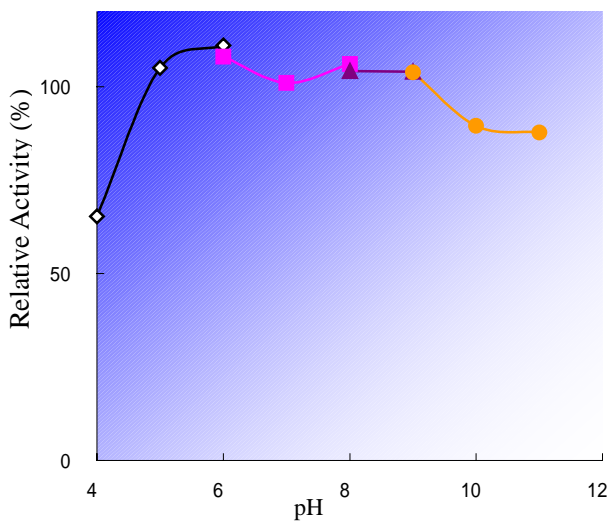
: 100mM acetate buffer  
 : 100mM phosphate buffer  
 : 100mM Tris-HCl buffer

**Fig.3. Optimum temperature**



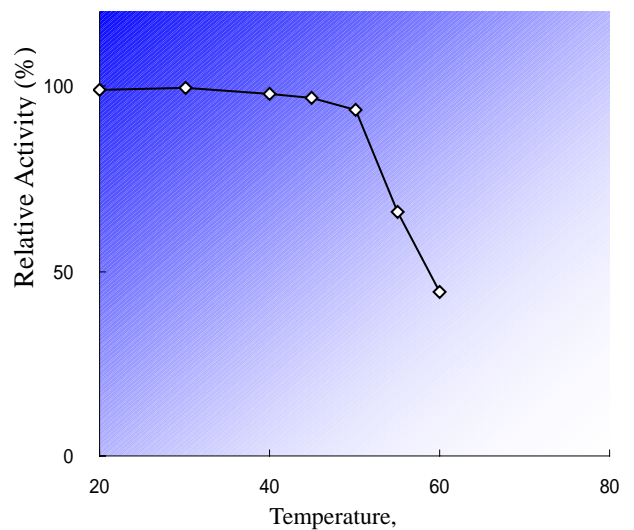
Buffer: 100mM K-phosphate buffer , pH 5.6

**Fig. 2 pH Stability**



Treatment : 25 ,20 hr  
 : 100mM acetate buffer  
 : 100mM phosphate buffer  
 : 100mM Tris-HCl buffer  
 : 100mM glycine-NaOH buffer

**Fig.4. Thermal stability**



Treatment: 10mM K-phosphate buffer with 0.2%BSA , pH 7.0,30min