

Capillary Electrophoresis Study on the Dimeric SOD Enzyme in the Presence of Ascorbic Acid

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A Notable decrease of the peak intensity of the capillary electrophoregram due to the dimeric SOD molecule was observed when a solution containing copper(II) chloride and ascorbic acid was added to the SOD solution, indicating that the capillary electrophoresis method is useful to detect the dissociation of the dimeric SOD molecule in solution, and that dissociation of the dimeric SOD molecule is induced by the presence of hydrogen peroxide. The present results may give reasonable countermeasures towards the sporadic amyotrophic lateral sclerosis in future.

Key words: Dissociation of Dimeric SOD, Capillary Electrophoresis, Hydrogen Peroxide