

The Electrical Characteristic of Modified 7Fe-8S Ferredoxin Protein on Gold Electrode

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The natural 7Fe-8S ferredoxin contains two different cluster, one [4Fe-4S] and the other [3Fe-4S] cluster. The 7Fe-8S ferredoxin was separated from *Azotobacter vinelandii*. We used modified ferredoxin that is made by recombinant DNA technology. The recombinant ferredoxin is modified for immobilization on gold electrode. We investigate to obtain the best condition to operate modified ferredoxin, and make a effort to measure the property of modified ferredoxin by electrochemistry method. Experimental results show the most effective condition of modified 7Fe-8S to reduction and oxidation for using for biomemory, and show the possibility of biomemory consisted of modified ferredoxin.