基于钯(Ⅱ)-8-羟基喹啉-5-磺酸-十二烷基硫酸钠络合体系极谱法测定SOD活性

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摘 要：在Na 2CO 3-NaHCO 3(pH8.9)缓冲溶液中，十二烷基硫酸钠（SDS）对钯（Ⅱ）与8-羟基喹啉-5-磺酸（8-OXSA）络合物峰电流有明显的增敏作用，其电极反应机理是电极表面生面的O - 2催化氧化反应中间体所致。由于超氧化歧化酶（SOD）可催化O - 2发生歧化反应，使钯-8-OXSA-SDS体系的峰电流降低，可通过测定峰电流的变化可以间接定量SOD的活性，据此建立测定SOD活性的方法，并研究几种常见的黄酮类化合物清除O - 2的作用。

关键词：

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Abstract: In the buffer solution of Na 2CO 3-NaHCO 3 (pH 8.9), the current of the alladium(Ⅱ)-8-hydroxyquinoline-5-sulfonic acid(8-OXSA) system with an anionic surfactant,sodium dodecyl sulfate(SDS) was increased markedly compared to that obtained without SDS.The reaction mechanism was related to formation of superoxied anions radical (O 2 -).Polaragraphic determination of superoxide dismutase activity and the study of scavenging of superoxide anions by flavonoilds was described which is based on that superoxide dismutass (SOD) cataolyzed the dismutation of superoxide radical and reduced the peak current of the palladium(Ⅱ)-8-OXSA-SDS system.

Key words: