Development of Human Interleukin-6 electrochemical Immunosensor Based on Pt-Pd Nanocomposite for Evaluation of Intervertebral Disc Degeneration

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To detect interleukin-6 (IL-6) antigen, a simple immunosensor with ultra-sensitivity was prepared. A wide linear response to IL-6 was observed with the immunosensor in range of 0.1-200 pg/mL, where the limit of detection was 0.032 pg/mL. The method described in this work, which exhibited remarkable accuracy, excellent reproducibility, comparable stability and wide linear range, can be employed to detect IL-6 in practical specimens, where these were promising in the field of evaluating intervertebral disc degeneration.

Keywords: Platinum; Palladium; Interleukin; Intervertebral disc degeneration

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