

### Detection of Helicobacter Pylori DNA using by hydrofluoric acid immobilized Carbon Probe Electrodes

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This paper describes the sensitive detection of HF immobilized biosensor for the rapid quantification of Helicobacter Pylori bacterium DNA, which is related to human gastritis cancer and gastric ulcers. Here, PCR testing methods require complicated separation and amplification techniques. However, electrochemical methods are fast and sensitive. Here, only detection that can be done within 60 sec was performed; the experiment in this process of cyclic and square wave voltammetry as a normal method was examined using HF coated working probe, graphite counter and reference probe. Here, in optimum para conditions such as experimental amplitude, frequency, initial potential, incremental potential, accumulation times, and others were examined. Final results showing the value of the current peak was determined using high sensitive signals or low detection limits. It is applied to live cells by comparing the presence of helicobacter DNA.