

**PATENT NO. EP 3294125**  
**DEVICE AND METHOD FOR DETECTING CREATININE AND ALBUMIN TO CREATININE RATIO**

**APPLICATION NO.** EP 16792263A

**APPLICANT**

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An electrochemically active, creatinine-binding device is provided to detect and measure quantitatively, creatinine in biological samples. The device of the present invention is also provided with a device to detect and measure quantitatively creatinine and albumin bioanalytes, simultaneously and to determine albumin to creatinine ratio (ACR). The present invention also provides an electrochemically active, creatinine-binding and albumin-binding device, for collection and retention of biological samples, having creatinine and albumin bioanalytes. In the present invention, a device holder is provided to receive the electrochemically active, creatinine-binding and albumin-binding device. The device, point-of-care biosensor and the method of the present invention, facilitate quantitative measurement of creatinine and albumin bioanalytes in urine and blood samples, and albumin to creatinine ratio (ACR), in urine samples, electrochemically, by determining redox current values.

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**CLAIM 1**

A device (100) for collecting and retaining a biological sample, comprising:  
(i) at least a two-electrode member (103a, 103b) connected to conductive tracks (102a, 102b) of a substrate (101); and  
(ii) a creatinine-binding and electrochemically active receptor (105), said receptor is non-enzymatic and is a non-antibody based metallic receptor and disposed to be in chemical contact with said at least two-electrode member (103a, 103b) and with a creatinine bioanalyte of a biological sample.