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[54] **FLUORESCENCE IMMUNOASSAY USING WATER INSOLUBLE DYES**

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[58] **Field of Search** 435/7, 810; 436/518, 436/546, 800, 808, 829; 424/38; 514/75–78

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[57] **ABSTRACT**

In a method for fluorescence immunoassay of an analyte, an antianalyte attached to the surface of a solid support is contacted with the analyte and a tracer which includes a substantially water insoluble fluorescent dye occluded in the nonaqueous portion of a sac. After binding reactions involving the antianalyte, analyte and tracer, the solid support is separated, excitation light is applied and fluorescence from dye in intact sacs bound to the solid support is measured and compared to fluorescence measured when known quantities of analyte are assayed. The invention includes a kit of materials useful in performing an immunoassay in accordance with the method of the invention.

18 Claims, 1 Drawing Sheet