

TABLE 5

Sample	ATP signal in RLU's	ATP signal Capture efficiency (%) after normalizing to water
<i>E. coli</i> (10^4) control (100% Signal)	18,143	N/A
Water sample (no <i>E. coli</i>)	1,109	N/A
Water sample with <i>E. coli</i> (no concentration)	1,776	4%

N = 2, Std deviation <10%

[0231] The complete disclosure of all patents, patent applications, and publications, and electronically available material cited herein are incorporated by reference. In the event that any inconsistency exists between the disclosure of the present application and the disclosure(s) of any document incorporated herein by reference, the disclosure of the present application shall govern. The foregoing detailed description and examples have been given for clarity of understanding only. No unnecessary limitations are to be understood therefrom. The invention is not limited to the exact details shown and described, for variations obvious to one skilled in the art will be included within the invention defined by the claims.

[0232] Unless otherwise indicated, all numbers expressing quantities of components, molecular weights, and so forth used in the specification and claims are to be understood as being modified in all instances by the term "about." Accordingly, unless otherwise indicated to the contrary, the numerical parameters set forth in the specification and claims are approximations that may vary depending upon the desired properties sought to be obtained by the present invention. At the very least, and not as an attempt to limit the doctrine of equivalents to the scope of the claims, each numerical parameter should at least be construed in light of the number of reported significant digits and by applying ordinary rounding techniques.

[0233] Notwithstanding that the numerical ranges and parameters setting forth the broad scope of the invention are approximations, the numerical values set forth in the specific examples are reported as precisely as possible. All numerical values, however, inherently contain a range necessarily resulting from the standard deviation found in their respective testing measurements.

[0234] All headings are for the convenience of the reader and should not be used to limit the meaning of the text that follows the heading, unless so specified.

1. A method of detecting cells in a sample, the method comprising:

- providing a cell concentration agent, a hydrogel comprising a cell extractant and a liquid sample suspected of containing cells;
- contacting the liquid sample and the cell concentration agent for a period of time;
- isolating the cell concentration agent from at least a portion of the liquid sample;
- forming a liquid mixture comprising the isolated cell concentration agent and the hydrogel, wherein the cell extractant is released into the mixture; and
- detecting a biological analyte;
- wherein detecting the biological analyte comprises quantifying an amount of the biological analyte;
- wherein the amount of the biological analyte is quantified two or more times;

wherein the amount of biological analyte detected at a first time point is compared to the amount of biological analyte detected at a second time point.

2. A method of detecting cells in a sample, the method comprising:

- providing a sample suspected of containing cells; a cell concentration agent; a hydrogel comprising a cell extractant; a detection article comprising a housing with two or more receptacles and an opening configured to receive the sample; and means for isolating and transferring the cell concentration agent from an upper receptacle to a lower receptacle in the housing;
- contacting in a liquid medium the sample with the cell concentration agent in the upper receptacle of the housing;
- isolating and transferring the cell concentration agent to the lower receptacle in the housing;
- forming a liquid mixture comprising the isolated cell concentration agent and the hydrogel, wherein the cell extractant is released into the mixture; and
- detecting a biological analyte;
- wherein detecting the biological analyte comprises quantifying an amount of the biological analyte;
- wherein the amount of the biological analyte is quantified two or more times;
- wherein the amount of biological analyte detected at a first time point is compared to the amount of biological analyte detected at a second time point.

3. A method of detecting cells in a sample, the method comprising:

- providing a sample suspected of containing cells; a detection article comprising a housing with an opening configured to receive the sample, an upper receptacle containing a cell concentration agent, and a lower receptacle containing a hydrogel comprising a cell extractant; means for isolating the cell concentration agent from at least a portion of the liquid sample; and means for transferring the cell concentration agent from the upper receptacle to the lower receptacle in the housing;
- contacting in a liquid medium the sample and the cell concentration agent in the upper receptacle of the housing;
- isolating and transferring the cell concentration agent to the lower receptacle of the housing;
- forming a liquid mixture comprising the isolated cell concentration agent and the hydrogel, wherein the cell extractant is released into the mixture; and
- detecting a biological analyte;
- wherein detecting the biological analyte comprises quantifying an amount of the biological analyte;
- wherein the amount of the biological analyte is quantified two or more times;
- wherein the amount of biological analyte detected at a first time point is compared to the amount of biological analyte detected at a second time point.

4-10. (canceled)

11. The method of claim, wherein detecting the biological analyte comprises detecting ATP from cells.

12. The method of claim 11, wherein detecting the ATP from cells comprises detecting ATP from microbial cells.

13-15. (canceled)

16. The method of claim 1, wherein detecting the biological analyte comprises detecting the biological analyte immunologically.