bound to a surface thereof thereby binding the analyte to the QCM by the analyte capture reagent, the improvement comprising reacting the bound analyte with (1) a conjugate comprising an enzyme and either an anti-analyte reagent or the analyte, and (2) a substrate which is catalyzed by the enzyme to form a product which accumulates on or reacts with the QCM surface to induce a mass change, thereby leading to a resonant frequency change of the QCM.

2. The method of claim 1 wherein the conjugate comprises an enzyme and an anti-analyte reagent.

3. The method of claim 1 wherein the analyte capture reagent is an antibody, lectin, chelating agent, binding protein, polynucleic acid probe, or cell receptor

4. The method of claim 3 wherein the analyte capture reagent is an antibody or polynucleic acid probe.

5. The method of claim 4 wherein the analyte capture reagent is an antibody.

6. The method of claim 1 wherein the anti-analyte reagent is an antibody, lectin, chelating agent, binding protein, polynucleic acid probe, or cell receptor.

7. The method of claim 3 wherein the analyte capture reagent is an antibody or polynucleic acid probe.

8. The method of claim 4 wherein the analyte capture reagent is an antibody.

9. The method of claim 1 wherein the enzyme is alkaline phosphatase and the substrate is 5-bromo-4-chloro-3-indolylphosphate.

10. The method of claim 1 wherein the enzyme is horseradish peroxidase.

11. The method of claim 1 wherein the surface is coated with a silane, polymer or organic thin film.

12. The method of claim 11 wherein the polymer is polyvinylferrocene, polypyrrole, polythiophene, polyacetylene or phthalocyanine.

13. The method of claim 12 wherein the enzyme is horseradish peroxidase and the substrate is hydrogen peroxide/iodide, urea peroxide/iodide or ferrocyanide.

14. The method of claim 13 wherein the substrate is hydrogen peroxide/iodide.

15. A method for detecting an analyte suspected of being present in a liquid sample, comprising reacting the sample with a support surface having an analyte capture reagent bound thereon, said support surface being in close proximity to the surface of a quartz crystal microbalance, and reacting the support surface with a (1) conjugate comprising an enzyme and either an anti-analyte reagent or the analyte and (2) a substrate which is catalyzed by the enzyme to form a product which accumulates on or reacts with the QCM surface to induce a mass change, thereby leading to a resonant frequency change of the QCM.

16. The method of claim 15 wherein the conjugate comprises an enzyme and an anti-analyte reagent.

17. The method of claim 15 wherein the analyte capture reagent is an antibody, lectin, chelating agent, binding protein, polynucleic acid probe, or cell receptor.

18. The method of claim 16 wherein the analyte capture reagent is an antibody or polynucleic acid probe.

19. The method of claim 17 wherein the analyte capture reagent is an antibody.

20. The method of claim 15 wherein the anti-analyte reagent is an antibody, lectin, chelating agent, binding protein, polynucleic acid probe, or cell receptor.

21. The method of claim 17 wherein the analyte capture reagent is an antibody or polynucleic acid probe.

22. The method of claim 18 wherein the analyte capture reagent is an antibody.

23. The method of claim 15 wherein the enzyme is horseradish peroxidase.

24. The method of claim 15 wherein the quartz crystal microbalance surface is coated with a silane, polymer or organic thin film.

25. The method of claim 24 wherein the polymer is polyvinylferrocene, polypyrrole, polythiophene, polyacetylene or phthalocyanine.

26. The method of claim 25 wherein the enzyme is horseradish peroxidase and the substrate is hydrogen peroxide/iodide, urea peroxide/iodide or ferrocyanide.

27. The method of claim 26 wherein the substrate is hydrogen peroxide/iodide.

28. The method of claim 15 wherein the support surface is nylon or nitrocellulose.

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