

2. The method of claim 1 comprising the additional step of:

(e) quantitatively determining the amount of said detectable product formed or depleted in said channel.

3. The method of claim 1 wherein one of said first reactant or said second reactant portion comprises an enzyme and the other of said first reactant or said second reactant portion comprises an enzyme substrate.

4. The method of claim 1 comprising the additional steps before step (a) of:

(i) contacting an immobilized reactant and an analyte in a solution;

(ii) adding to said solution said competitor; and

(iii) using an aliquot of said solution, said aliquot defining said sample.

5. The method of claim 4 wherein said immobilized reactant is an immobilized antibody.

6. The method of claim 1 wherein said sample is the result of an immunological reaction.

7. The method of claim 6 wherein said immunological reaction is a competitive reaction.

8. The method of claim 1 wherein the analyte is charged.

9. The method of claim 1 wherein the analyte is complexed to the competitor which defines an analyte-competitor complex, and the analyte-competitor complex comprises a charge modifier.

10. The method of claim 1 wherein said biorecognition portion is selected from the group consisting of antibodies, antigens, enzymes, peptides, peptide nucleic acids, oligonucleotides, deoxyribonucleic acids, ribonucleic acids, biotins and their complementary binding complexes, lectins and their complementary carbohydrate binding complexes, and cellular receptor binding proteins and their complementary binding products.

11. The method of claim 1 wherein said channel used in step (a) contains said first reactant prior to the introduction of said sample.

12. The method of claim 1 including the additional step of:

subjecting said channel to zero potential by removing said electric potential after contact between said competitor and said first reactant for a time sufficient to allow said detectable product to form or to deplete.

13. The method of claim 12 further comprising, after said step of subjecting said channel to zero potential, and, the step of:

re-imposing along the length of said channel said electric potential for a time sufficient to allow said detectable product to migrate in said channel.

14. The method of claim 1 wherein said sample comprises one or more competitors comprising different biorecognition portions.

15. The method of claim 14 wherein one or more first reactants are introduced into said channel.

16. The method of claim 15 wherein plural detectable products are formed or depleted.

17. A method for performing an assay, said method comprising:

(a) conducting a heterogeneous competitive reaction in a vessel among an immobilized reactant, an analyte, and a competitor, wherein the competitor comprises a biorecognition portion and a second reactant portion;

(b) introducing an aliquot of the competitor which is unbound in step (a) into a channel containing an electrophoresis medium and a first reactant;

(c) imposing an electrical potential along the length of the channel to cause, the second reactant portion of the

competitor and the first reactant to form or deplete a detectable product within the channel; and

(d) detecting the detectable product.

18. The method of claim 17 comprising the additional step of:

(e) quantitatively determining the amount of said detectable product formed or depleted in said channel.

19. The method of claim 17 wherein one of said first reactant or said second reactant portion comprises an enzyme and the other of said first reactant or said second reactant portion comprises an enzyme substrate.

20. The method of claim 17 wherein said biorecognition portion is selected from the group consisting of antibodies, antigens, enzymes, peptides, peptide nucleic acids, oligonucleotides, deoxyribonucleic acids, ribonucleic acids, biotins and their complementary binding complexes, lectins and their complementary carbohydrate binding complexes, and cellular receptor binding proteins and their complementary binding products.

21. The method of claim 17 wherein said immobilized reactant is an immobilized antibody.

22. The method of claim 17 wherein said channel used in step (b) contains said first reactant prior to the introduction of said aliquot.

23. The method of claim 17 including the additional step of:

subjecting said channel to zero potential by removing said electric potential after contact between said competitor and said first reactant for a time sufficient to allow said detectable product to form or to deplete.

24. The method of claim 23 further comprising, after said step of subjecting said channel to zero potential, and the step of:

re-imposing along the length of said channel said electric potential for a time sufficient to allow said detectable product to migrate in said channel.

25. An analytical device comprising a capillary zone electrophoresis channel, said channel comprising:

a free solution electrophoretic medium,

a first reactant in said electrophoretic medium that will react in said channel with a second reactant portion of a competitor to form or deplete a detectable product wherein the competitor further comprises a biorecognition portion; and

said analytical device further comprising electrical power means for applying a field across the ends of said channel to cause said first reactant and said second reactant portion of said competitor to migrate and react.

26. The device of claim 25 further comprising a detector for detecting said detectable product.

27. The device of claim 26 further comprising a quantifier for quantitatively determining the amount of said detectable product detected.

28. The device of claim 25 wherein said channel is a capillary.

29. The device of claim 25 wherein said competitor and said first reactant are spaced apart within said channel such that, upon the application of an electric field along the length of said channel by said electrophoresis apparatus, said competitor or said first reactant migrates in said channel to permit said first reactant to react with said second reactant portion of said competitor to form or deplete said detectable product.