

10. The microfluidic device of claim 9, further comprising a separating unit for separating a fluidic component of a fluid sample, the separating unit comprising

a flowing microfluidic channel in fluidic communication with the inlet, the flowing microfluidic channel having a flowing channel resistance, and

an assaying microfluidic channel in fluidic communication with the flowing channel, the assaying microfluidic channel having an assaying channel resistance,

wherein the flowing microfluidic channel resistance and the assaying microfluidic channel resistance are adapted to control flowing of the fluidic component from the flowing microfluidic channel to the assaying microfluidic channel and

wherein the array is located on the assaying microfluidic.

11. The microfluidic device of claim 9, wherein the at least one target is a plurality of targets, and the at least one capture agent or component thereof is a plurality of capture agents or components thereof, each capture agent of the plurality of capture agents bindingly distinguishable and positionally distinguishable from another, each capture agent of the plurality of capture agents capable of specifically binding each target of the plurality of targets to form a capture agent target binding complex.

12. The microfluidic device of claim 11, wherein the plurality of capture agents or components thereof comprise

a plurality of array polynucleotides attached to the array, each polynucleotide of the plurality of array polynucleotides attached to the array being sequence specific and positionally distinguishable from another.

13. The microfluidic device of claim 12, wherein the plurality of capture agents or components thereof comprise

a plurality of polynucleotide-encoded proteins, each polynucleotide-encoded protein comprising a protein and an encoding polynucleotide attached to the protein, wherein the protein specifically binds to a predetermined target of a plurality of targets and the encoding polynucleotide specifically binds to a sequence-specific and positionally distinguishable polynucleotide of the plurality of polynucleotides attached to the array, each protein and encoding polynucleotide being bindingly distinguishable from another.

14. A system for the detection of at least one target in a sample, the system comprising

the array of claim 1; and

a device for detecting the barcoded pattern on the array.

15. The system of claim 14, wherein the at least one target is a plurality of targets, and the at least one capture agent or component thereof is a plurality of capture agents or components thereof, each capture agent of the plurality of capture agents bindingly distinguishable and positionally distinguishable from another, each capture agent of the plurality of capture agents capable of specifically binding each target of the plurality of targets to form a capture agent target binding complex.

16. The system of claim 15, wherein the barcoded pattern of the array is associated with a biological profile and the device for the detecting the barcoded pattern comprises provides a visual indication of the biological profile

17. The system of claim 15, wherein the barcoded pattern of the array is associated with a diagnostic indication and the device for the detecting the barcoded pattern comprises provides a visual indication of the diagnostic indication.

18. A system for the detection of a plurality of targets in a sample, the system comprising

the array of claim 7; and

a plurality of polynucleotide-encoded proteins, each polynucleotide-encoded protein comprising a protein and an encoding polynucleotide attached to the protein, wherein the protein specifically binds to a predetermined target of the plurality of targets and the encoding polynucleotide specifically binds to a sequence-specific and positionally distinguishable polynucleotide of the plurality of polynucleotides attached to the array, each protein and encoding polynucleotide being bindingly distinguishable from another

19. The system of claim 18, the system further comprising a plurality of labeled molecules, each labeled molecule comprising a component that specifically binds one target of the plurality of targets and a label compound attached to said component, the label compound providing a labeling signal, each labeled molecule being detectably distinguishable from another.

20. A method for detecting a plurality of targets in a sample, the method comprising

contacting said sample with the array of claim 2, for a time and under conditions to allow binding of said plurality of targets with said plurality of capture agents to form capture agent target binding complexes; and

detecting said capture agent target binding complexes.

21. A substrate for detecting at least one detectable target, the substrate configured to allow attachment of said at least one detectable target on the substrate along substantially parallel lines, the substantially parallel lines forming a barcoded pattern.

22. A microfluidic device comprising the substrate according to claim 21.

23. A system for detecting a plurality of detectable targets, the system comprising: the substrate according to claim 21 and a device for detecting the barcoded pattern.

24. A method for detecting a plurality of targets, in a sample, the method comprising: contacting said sample with the substrate according to claim 21 for a time and under conditions to allow binding of said plurality of targets with said substrate; and detecting said plurality of targets attached to the substrate.

25. A method to attach a molecule on a fluidic support along a predetermined microfluidic pattern, the method comprising:

providing a mold, the mold comprising fluidic channels, each microfluidic channel having an inlet and an outlet, each of the outlets of the channels configured to form part of the predetermined pattern,

providing the support, said support suitable to be coupled with the mold,

coupling the mold with the support,

providing the molecule in the fluidic channels for a time and under conditions to allow attachment of the molecule on the support; and

decoupling the mold from the support.

26. The method of claim 25, wherein said pattern comprises substantially parallel lines forming a barcoded pattern.

27. The method of claim 26, wherein said support is the substrate according to claim 21.

28. The method of claim 26, wherein said support comprises the array of claim 1.