What is claimed is:

1. A method for detecting the presence of hepatocellular carcinoma (HCC) biomarkers in a subject suspected of having HCC, the method comprising:

(a) providing a serum sample from the subject suspected of having HCC and measuring the serum for the presence of primary biomarker auto-antibodies against a set of biomarkers, wherein the set of biomarkers comprises RhoA, TXN, HDGF2, SOD1, IL-17A and IL26; and

(b) detecting the presence of the HCC biomarkers in the subject suspected of having HCC, the method comprising the steps of:

(i) mixing the serum sample with the set of biomarker conjugates to allow the primary biomarker auto antibodies, if present in the serum sample, to bind to the set of biomarker conjugates and washing away any unbound antibodies;

wherein the set of biomarker conjugates comprises each of the biomarkers in the set of biomarkers conjugated via an amide bond to a unique fluorescent microsphere bead, wherein each unique fluorescent microsphere bead associated with a specific particular biomarker in the set of biomarkers has a different emission wavelength for each biomarker,

wherein the biomarker conjugates are capable of being bound by a specific primary biomarker auto antibody present in the subject's serum sample,

(ii) adding to the mixture formed in step (i) anti-human secondary antibodies conjugated with phycoerythrin (PE), which are capable of binding primary biomarker auto antibodies; and allowing the anti-human secondary antibodies conjugated with PE to bind to specific primary antibodies bound to biomarker conjugates to form a fluorescent bead-biomarker-auto antibody-PE conjugated antibody cascade, and washing away any unbound antibodies; and

(iii) measuring the mixture formed in step (ii) for the presence fluorescent bead-biomarker-auto antibody-PE conjugated antibody cascade to determine whether the subject's serum contained primary biomarker auto antibodies.

2. The method of claim 1, wherein the set of biomarkers comprises Bmi-1, VCC1, SUMO-4, RhoA, TXN, ET-1, UBE2C, HDGF2, FGF21, LECT2, SOD1, STMN4, Midkine, IL-17A and IL26.

3. The method of claim 1 or 2, wherein the unique fluorescent signal from the microsphere beads serves to identify which biomarker in the set of biomarkers is present and wherein the signal from the PE indicates the presence of the biomarker conjugate.

4. The method of claim 3, wherein fluorescent intensity given by the PE-conjugated secondary antibodies in the fluorescent bead-biomarker-auto antibody-PE conjugated antibody cascade is measured to allow the detection and quantification of the primary biomarker auto antibodies.

5. The method of claim 1, wherein the set of biomarkers consists of RhoA, TXN, HDGF2, SOD1, IL-17A and IL26.

6. The method of claim 1, wherein the set of biomarkers consists of Bmi-1, VCC1, SUMO-4, RhoA, TXN, ET-1, UBE2C, HDGF2, FGF21, LECT2, SOD1, STMN4, Midkine, IL-17A and IL26.

7. The method of claim 1, wherein the set of biomarkers comprises HDGF2.

8. A method for detecting the presence of hepatocellular carcinoma (HCC) biomarkers in a plurality of subjects having HCC at different stages, the method comprising:

(a) providing a serum sample from a plurality of subjects having HCC at different stages and measuring the serum for the presence of

primary biomarker auto-antibodies against a set of biomarkers, wherein the set of biomarkers comprises RhoA, TXN, HDGF2, SOD1, IL-17A and IL26;

(b) detecting the presence of the HCC biomarkers in the plurality of subjects having HCC at different stages, the method comprising the steps of:

(i) mixing the serum sample with the set of biomarker conjugates to allow the primary biomarker auto antibodies, if present in the serum sample, to bind to the set of biomarker conjugates and washing away any unbound antibodies;

wherein the set of biomarker conjugates comprises each of the biomarkers in the set of biomarkers conjugated via an amide bond to a unique fluorescent microsphere bead, wherein each unique fluorescent microsphere bead associated with a specific particular biomarker in the set of biomarkers has a different emission wavelength for each biomarker,

wherein the biomarker conjugates are capable of being bound by a specific primary biomarker auto antibody present in the subject's serum sample,

(ii) adding to the mixture formed in step (i) anti-human secondary antibodies conjugated with phycoerythrin (PE), which are capable of binding primary biomarker auto antibodies; and allowing the anti-human secondary antibodies conjugated with PE to bind to specific primary antibodies bound to biomarker conjugates to form fluorescent bead-biomarker-auto antibody-PE conjugated antibody cascade, and washing away any unbound antibodies; and

(iii) measuring the mixture formed in step (ii) for the presence fluorescent bead-biomarker-auto antibody-PE conjugated antibody cascade to determine whether the plurality of subjects' serum contained primary biomarker auto antibodies.

9. The method of claim 8, wherein the set of biomarkers comprises Bmi-1, VCC1, SUMO-4, RhoA, TXN, ET-1, UBE2C, HDGF2, FGF21, LECT2, SOD1, STMN4, Midkine, IL-17A and IL26.

10. The method of claim 9, wherein the set of biomarkers comprises HDGF2.

11. A method for detecting the presence of hepatocellular carcinoma (HCC) biomarkers in a subject suspected of having HCC, the method comprising:

(a) providing a serum sample from the subject suspected of having HCC and measuring the serum for the presence of at least one primary biomarker auto-antibodies against a set of biomarkers, wherein the set of HCC biomarkers comprises RhoA, TXN, HDGF2, SOD1, IL-17A and IL26; and

(b) detecting the presence of at least one of the HCC biomarkers in the subject suspected of having HCC, the method comprising the steps of:

(i) mixing the serum sample with the set of biomarker conjugates to allow the primary biomarker auto antibodies, if present in the serum sample, to bind to the set of biomarker conjugates and washing away any unbound antibodies;

wherein the set of biomarker conjugates comprises each of the biomarkers in the set of biomarkers conjugated via an amide bond to a unique fluorescent microsphere bead, wherein each unique fluorescent microsphere bead associated with a specific particular biomarker in the set of biomarkers has a different emission wavelength for each biomarker,

wherein the biomarker conjugates are capable of being bound by a specific primary biomarker auto antibody present in the subject's serum sample,

(ii) adding to the mixture formed in step (i) anti-human secondary antibodies conjugated with phycoerythrin (PE), which are capable of binding primary biomarker auto antibodies; and

allowing the anti-human secondary antibodies conjugated with PE to bind to specific primary antibodies bound to biomarker conjugates to form a fluorescent bead-biomarker-auto antibody-PE conjugated antibody cascade, and washing away any unbound antibodies; and

(iii) measuring the mixture formed in step (ii), for the presence fluorescent bead-biomarker-auto antibody-PE conjugated antibody cascade to determine whether the subject's serum contained at least one primary biomarker auto antibodies.

12. The method of claim 11, wherein the set of biomarkers consists of RhoA, TXN, HDGF2, SOD1, IL-17A and IL26.

13. The method of claim 11, wherein the set of biomarkers comprises Bmi-1, VCC1, SUMO-4, RhoA, TXN, ET-1, UBE2C, HDGF2, FGF21, LECT2, SOD1, STMN4, Midkine, IL-17A and IL26.

14. The method of claim 13, wherein the set of biomarkers comprises HDGF2.

15. A method for detecting the presence of hepatocellular carcinoma (HCC) biomarkers in a plurality of subjects having HCC at different stages, the method comprising:

(a) providing a serum sample from a plurality of subjects having HCC at different stages and measuring the serum for the presence of at least one primary biomarker auto-antibodies against a set of biomarkers, wherein the set of biomarkers comprises RhoA, TXN, HDGF2, SOD1, IL-17A and IL26; and

(b) detecting the presence of the at least one of the HCC biomarkers in the plurality of subjects having HCC at different stages, the method comprising the steps of:

(i) mixing the serum sample with the set of biomarker conjugates to allow the primary biomarker auto antibodies, if present in

the serum sample, to bind to the set of biomarker conjugates and washing away any unbound antibodies;

wherein the set of biomarker conjugates comprises each of the biomarkers in the set of biomarkers conjugated via an amide bond to a unique fluorescent microsphere bead, wherein each unique fluorescent microsphere bead associated with a specific particular biomarker in the set of biomarkers has a different emission wavelength for each biomarker,

wherein the biomarker conjugates are capable of being bound by a specific primary biomarker auto antibody present in the subject's serum sample,

(ii) adding to the mixture formed in step (i), anti-human secondary antibodies conjugated with phycoerythrin (PE), which are capable of binding primary biomarker auto antibodies; and allowing the anti-human secondary antibodies conjugated with PE to bind to specific primary antibodies bound to biomarker conjugates to form a fluorescent bead-biomarker-auto antibody-PE conjugated antibody cascade, and washing away any unbound antibodies; and

(iii) measuring the mixture formed in step (ii) for the presence of the fluorescent bead-biomarker-auto antibody-PE conjugated antibody cascade to determine whether the plurality of subjects' serum contained primary biomarker auto antibodies.

16. The method of claim 15, wherein the set of biomarkers comprises Bmi-1, VCC1, SUMO-4, RhoA, TXN, ET-1, UBE2C, HDGF2, FGF21, LECT2, SOD1, STMN4, Midkine, IL-17A and IL26.

17. The method of claim 15, wherein the unique fluorescent signal from the microsphere beads serves to identify which biomarker in the set of biomarkers is present and wherein the signal from the PE indicates the presence of the biomarker conjugate.

18. The method of claim 17, wherein fluorescent intensity given by the PE-conjugated secondary antibodies in the fluorescent bead-biomarker-auto antibody-PE conjugates antibody cascade is measured to allow the detection and quantification of the primary biomarker auto antibodies.

19. The method of claim 15, wherein the set of biomarkers consists of RhoA, TXN, HDGF2, SOD1, IL-17A and IL26.

20. The method of claim 15, wherein the set of biomarkers consists of Bmi-1, VCC1, SUMO-4, RhoA, TXN, ET-1, UBE2C, HDGF2, FGF21, LECT2, SOD1, STMN4, Midkine, IL-17A and IL26.

21. A kit for detecting HCC biomarker auto-antibodies to a plurality of hepatocellular carcinoma (HCC) biomarkers in a patient's serum, the kit comprising:

(a) a set of 15 hepatocellular carcinoma (HCC) biomarker conjugates comprising at least one HCC biomarker protein set forth in SEQ ID NOs: 1-15, wherein each protein set forth in SEQ ID Nos: 1-15 is coupled to a different fluorescent microsphere bead having a different emission wavelength; and

(b) a PE-conjugated secondary antibody capable of binding to all of the HCC biomarker auto-antibodies to the plurality of HCC biomarkers wherein the HCC biomarkers are at least one of Bmi-1, VCC1, SUMO-4, RhoA, TXN, ET-1, UBE2C, HDGF2, FGF21, LECT2, SOD1, STMN4, Midkine, IL-17A and IL26 as set forth in SEQ ID NOs: 1-15.

22. The kit of claim 21, wherein the plurality of HCC biomarkers comprises HDGF2.

23. The kit of claim 22, wherein the plurality of HCC biomarkers comprises Bmi-1, VCC1, SUMO-4, RhoA, TXN, ET-1, UBE2C, HDGF2, FGF21, LECT2, SOD1, STMN4, Midkine, IL-17A and IL26.

24. The kit of claim 23, wherein the plurality of HCC biomarkers comprises at least one of RhoA, TXN, HDGF2, SOD1, IL-17A and IL26.

25. The kit of claim 24, wherein the plurality of HCC biomarkers comprises RhoA, TXN, HDGF2, SOD1, IL-17A and IL26.

26. The kit of claim 21, wherein the kit is capable of detecting an auto-antibody to any one of the hepatocellular carcinoma (HCC) biomarker present in the patient's serum when the auto-antibody is present at an amount as low as about 0.15 ng/mL.