

CLAIMS

What is claimed is:

1. A method of preparing a miRNA comprising:
 - a. providing a saliva, sputum, urine, lymphatic fluid, synovial fluid, cerebrospinal fluid, stool, or mucus sample from a subject, wherein the saliva, sputum, urine, lymphatic fluid, synovial fluid, cerebrospinal fluid, stool, or mucus sample comprises nucleic acids and wherein the subject is suspected of having endometriosis or the subject has a symptom of endometriosis;
 - b. selectively extracting RNA from the saliva, sputum, urine, lymphatic fluid, synovial fluid, cerebrospinal fluid, stool, or mucus sample in order to obtain extracted RNA; and
 - c. performing an amplification reaction on the extracted RNA in order to detect a level of at least one miRNA in the sample, wherein the at least one miRNA is selected from the group consisting of miR-18, miR-125, miR-126, miR-143, miR-145, miR-150, miR-214, miR-342, miR-451, miR-500, miR-553, miR-3613, miR-4668, and miR-6755; wherein the amplification reaction is performed using primers specific for the at least one miRNA.
2. The method of claim 1, wherein the sample is saliva.
3. The method of claim 1, wherein the at least one miRNA comprises at least one miRNA selected from the group consisting of miR-125, miR-451, and miR-3613.
4. The method of claim 1, wherein the at least one miRNA comprises miR-125b.
5. The method of claim 1, wherein the at least one miRNA comprises miR-125b-5p.
6. The method of claim 1, wherein the at least one miRNA comprises miR-451a.
7. The method of claim 1, wherein the at least one miRNA comprises miR-3613-5p.
8. The method of claim 1, wherein the detecting the level of the at least one miRNA comprises: (i) amplifying miRNA within the sample by performing a reverse transcription assay using a primer that specifically binds the at least one miRNA or using a universal primer, thereby producing cDNA; (ii) contacting the produced cDNA with a probe specific for the at least one miRNA, wherein the probe emits a signal upon binding the produced cDNA; and (iii) using a detector to detect the signal emitted by the probe.

9. The method of claim 1, wherein the detecting the level of the at least one miRNA is by quantitative PCR.
10. The method of claim 1, wherein the detecting the level of the at least one miRNA further comprises performing a reverse transcription reaction on the at least one miRNA using at least one primer or probe specific for the at least one miRNA or using at least one universal primer.
11. The method of claim 1, wherein the detecting the level of the at least one miRNA comprises: (i) amplifying miRNA within the sample by performing a reverse transcription assay using a primer that specifically binds the at least one miRNA or using a universal primer, thereby producing cDNA; (ii) contacting the produced cDNA with an intercalating dye that emits a signal; and (iii) using a detector to detect the emitted signal over time.
12. The method of claim 1, wherein the subject is negative for the presence of a KRAS variant allele.
13. The method of claim 1, wherein the at least one miRNA further comprises let-7, let-7a, let-7b, let-7c, let-7d, let-7e, let-7f, or let-7g.
14. The method of claim 1, wherein the detecting the level of the at least one miRNA comprises detecting the level of at least two miRNAs selected from the group consisting of miR-125, miR-342, miR-451, and miR-3613.
15. The method of claim 1, wherein the detecting the level of the at least one miRNA comprises detecting the level of at least three miRNAs selected from the group consisting of miR-18, miR-125, miR-126, miR-143, miR-145, miR-150, miR-214, miR-342, miR-451, miR-500, miR-553, miR-3613, miR-4668, and miR-6755.
16. The method of claim 1, wherein the subject has a symptom of endometriosis.
17. The method of claim 1, wherein the subject is suspected of having endometriosis.
18. The method of claim 1, wherein the subject is suspected of having endometriosis due to the subject's medical history.
19. The method of claim 1, wherein a column is used to selectively extract RNA from the saliva, sputum, urine, lymphatic fluid, synovial fluid, cerebrospinal fluid, stool, or mucus sample.
20. The method of claim 1, wherein a column is used to selectively extract RNA from the saliva sample.
21. The method of claim 1, wherein the at least one miRNA comprises miR-125b, let-7b, and miR-3613.

22. The method of claim 1, wherein the subject is human.