

-continued

&lt;400&gt; SEQUENCE: 89

agacaggaga ttcgatatgt gg

22

&lt;210&gt; SEQ ID NO 90

&lt;211&gt; LENGTH: 20

&lt;212&gt; TYPE: DNA

<213> ORGANISM: *Bacillus anthracis*

&lt;400&gt; SEQUENCE: 90

agattttccg acggcaggtt

20

&lt;210&gt; SEQ ID NO 91

&lt;211&gt; LENGTH: 22

&lt;212&gt; TYPE: DNA

<213> ORGANISM: *Bacillus anthracis*

&lt;400&gt; SEQUENCE: 91

tttcaatcaa tcgcgctta tt

22

We claim:

1. An isolated nucleic acid molecule consisting of:
  - (a) 22 or more consecutive nucleotides of the sequence set forth in SEQ ID NO:1 or its complement;
  - (b) 30 or more consecutive nucleotides of the sequence set forth in SEQ ID NO:1 or its complement;
  - (c) 40 or more consecutive nucleotides of the sequence set forth in SEQ ID NO:1 or its complement;
  - (d) 50 or more consecutive nucleotides of the sequence set forth in SEQ ID NO:1 or its complement;
  - (e) 60 or more consecutive nucleotides of the sequence set forth in SEQ ID NO:1 or its complement;
  - (f) 70 or more consecutive nucleotides of the sequence set forth in SEQ ID NO:1 or its complement;
  - (g) 80 or more consecutive nucleotides of the sequence set forth in SEQ ID NO:1 or its complement;
  - (h) 90 or more consecutive nucleotides of the sequence set forth in SEQ ID NO:1 or its complement;
  - (i) 100 or more consecutive nucleotides of the sequence set forth in SEQ ID NO:1 or its complement;
  - (j) the sequence set forth in SEQ ID NO:1 or its complement.
2. A probe consisting of the isolated nucleic acid molecule of claim 1 and a label.
3. A probe consisting of the isolated nucleic acid molecule of claim 1, a reporter molecule, and a quencher molecule.
4. The probe of claim 3, wherein the reporter molecule produces a signal upon the separation of the reporter molecule and the quencher molecule.
5. The probe of claim 3, wherein the quencher molecule is capable of quenching the signal of the reporter molecule.
6. The probe of claim 3, wherein the reporter molecule is a fluorophore.
7. The probe of claim 6, wherein the fluorophore is FAM, ROX, Texas Red, TET, TAMRA, JOE, HEX, CAL Red, or VIC.
8. The probe of claim 3, wherein the probe is capable of being cleaved by a protein thereby separating the reporter molecule from the quencher molecule.
9. The probe of claim 8, wherein the protein is Taq polymerase.
10. An assay which comprises contacting the probe of claim 2 with a target nucleic acid molecule.
11. The assay of claim 10, wherein the assay is a nucleic acid hybridization assay.
12. The assay of claim 10, wherein the assay is a Taq-Man® based assay.
13. The assay of claim 11, further comprising conducting PCR amplification.
14. The assay of claim 13, further comprising detecting the presence or measuring the amount of the probe and detecting the presence or measuring the amount of the target nucleic acid molecule.
15. The assay of claim 14, wherein the absence of the target nucleic acid molecule and the absence of the probe indicate a true negative result for the target nucleic acid molecule.
16. The assay of claim 14, wherein the absence of the target nucleic acid molecule and the presence of the probe indicate a false negative result for the target nucleic acid molecule.
17. A kit for a probe-based nucleic acid assay comprising the isolated nucleic acid molecule of claim 1 packaged with instructions for use.
18. The kit of claim 17, wherein the isolated nucleic acid molecule contains a label.
19. The kit of claim 17, wherein the label is a reporter molecule and a quencher molecule.
20. The kit of claim 17, wherein the probe-based nucleic acid assay is for the detection of an organism.
21. The kit of claim 20, wherein the organism belongs to *Bacillus*.
22. The kit of claim 21, wherein the organism is *Bacillus anthracis*.
23. The kit of claim 19, further comprising reagents or components for detecting the presence of a nucleic acid molecule belonging to the organism.

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