

-continued

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We claim:

1. An isolated nucleic acid molecule comprising the sequence set forth in SEQ ID NO: 49.

2. The isolated nucleic acid molecule of claim 1, wherein the nucleic acid molecule consists essentially of the sequence set forth in SEQ ID NO: 49.

3. The isolated nucleic acid molecule of claim 1, wherein the nucleic acid molecule consists of the sequence set forth in SEQ ID NO: 49.

4. An isolated nucleic acid molecule that has a sequence identity of at least about 70% to the isolated nucleic acid molecule of claim 1 over the 548 bp region of SEQ ID NO: 49.

5. The isolated nucleic acid molecule of claim 4, wherein sequence identity is at least about 80%.

6. The isolated nucleic acid molecule of claim 4, wherein sequence identity is at least about 90%.

7. The isolated nucleic acid molecule of claim 4, wherein sequence identity is at least about 95%.

8. A probe comprising the isolated nucleic acid molecule of claim 4 and a label.

9. A probe comprising the isolated nucleic acid molecule of claim 4, a reporter molecule, and a quencher molecule.

10. The probe of claim 9, wherein the reporter molecule produces a signal upon the separation of the reporter molecule and the quencher molecule.

11. The probe of claim 9, wherein the quencher molecule is capable of quenching the signal of the reporter molecule.

12. The probe of claim 11, wherein the reporter molecule is a fluorophore.

13. The probe of claim 12, wherein the fluorophore is FAM, ROX, Texas Red, TET, TAMRA, JOE, HEX, CAL Red, or VIC.

14. The probe of claim 9, wherein the probe is capable of being cleaved by a protein thereby separating the reporter molecule from the quencher molecule.

15. The probe of claim 14, wherein the protein is Taq polymerase.

16. An assay which comprises using the probe of claim 8.

17. The assay of claim 16, wherein the assay is a nucleic acid hybridization assay.

18. The assay of claim 16, wherein the assay is a Taq-Man® based assay.

19. The assay of claim 16, further comprising conducting PCR amplification.