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# Certificate of Analysis

## Streptobacillus moniliformis

### PCR Positive Control

**Catalog Number:** PCRPC183

**Date:** April 2016

**Volume:** 250 µl, 250 PC Reactions

**DNA Concentration:** 200 ng/µl of DNA in TE buffer. Use 0.5 to 1.0 µl per PCR reaction.

**Specific Activity:** At least 500 copies per µl.

**Storage conditions:** -20° C to -70° C

**Typical PCR reaction:** Total volume 50 µl, 25 µl water, 5 µl 10x PCR Buffer, 2 µl 50

mM MgSO<sub>4</sub>, 1 µl 10 mM dNTP mix, 1 µl 10 µM Forward Primer, 1 µl 10 µM Reverse Primer, DNA 0.5 to 1 µl, add water to 49.5 µl, and add last 0.5 µl *Taq* Polymerase. Mix, spin down gently, and put tubes in thermal cycler. Alternatively, a master mix including everything except some water and DNA may be used.

**Typical Thermal Cycler Program:**

- |    |          |          |
|----|----------|----------|
| 1. | 94°C     | 2 min    |
| 2. | 94°C     | 15 sec   |
| 3. | 55°C     | 30 sec   |
| 4. | 0.5°/sec | to 68°C  |
| 5. | 68°C     | 2 min    |
| 6. | Go to 2  | 35 times |
| 7. | 72°C     | 5 min    |
| 8. | 4°C      | forever  |
| 9. | End      |          |

**PCR Primers:** FOR 5'-CAT ACT CGG AAT AAG ATG G-3'      **PCR product is 269 bases**

REV 5'-GCT TAG CTC CTC TTT GTA C-3'

**References:** Kimura, M. et al., Detection of Streptobacillus spp. in feral rats by specific polymerase chain reaction. *Microbiol Immunol* 52:9-15, 2008.

**This product is distributed for laboratory research use only. The safety and efficacy of this product in diagnostic or other clinical uses has not been established.**