

Certificate of Analysis

Simian Virus 40

PCR Positive Control

Catalog Number: PCRPC855

Date: November 2018

Volume: 250 µl, 250 PC Reactions

DNA Concentration: 150 pg/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 MgSO₄, 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:

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|----|----------|----------|
| 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 |

PCR Primer sequences (5'-3'): Forward, ATA TGC CTT TCT CAT MAG AGG

Reverse, CAG ACA CAG TAG CAA TTA GGT C

PCR Product: Classical strain 776 is 791 bases and type 2 strain Ri257 is 703 bases.

Reference: Z. Fagrouch, et, al., Molecular analysis of a novel Simian virus 40 (SV40) type in Rhesus Macaques and evidence for double infections with the classical SV40 type. *J. Clin. Microbiol.* 49:4, p. 1280-1286, April 2011.

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