Supplementary Information for Lab on a Chip
This journal is ©The Royal Society of Chemistry 2010

NEW FAMILY OF FLUORINATED POLYMER CHIPS FOR DROPLET AND ORGANIC SOLVENT MICROFLUIDICS

Stefano Begolo, Guillaume Colas,
Jean-Louis Viovy and Laurent Malaquin

Compatibility of THV with PCR amplification.

The compatibility of THV 500G with PCR was studied by performing the amplification of a 500bp fragment of a Litmus 28i vector. We added small pieces of THV in the tube containing the mix and performed classic PCR amplification in a thermocycler. The total surface to volume ratio was ∼2 $mm^2/\mu L$. The mix contained dNTPs (0,2 mM), 1,25 units of HotStartTaq polymerase (Quiagen), PCR primers (250nM), 10^7 copies of Li 28i vector, and 1X PCR buffer.

The presence of THV pieces in solution did not affect the amplification provided that BSA was added to the mix (0,08% w/v), as reported in Fig.1.

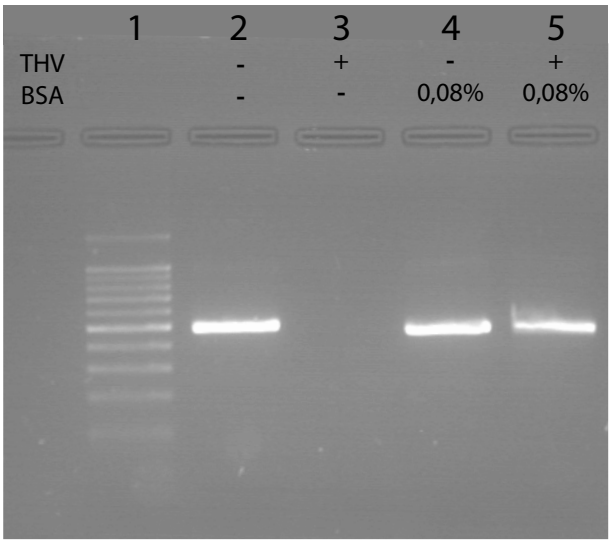

Figure 1: Electrophoresis gel for testing PCR compatibility of THV. Lane 1: 100bp Ladder; Lane 2: PCR mix (positive control); Lane 3: PCR mix with THV pieces; Lane 4: PCR mix with 0,08% BSA; Lane 5: PCR mix with 0,08% BSA and THV pieces.