

Figure 4 reveals the Analytical sensitivity and amplification equivalence of QC-PCR for both WT and IS plasmid DNA. Five μl (10^1 - 10^5) / μl of each of WT and IS plasmid DNA copies were amplified separately. The amplified

PCR products were analyzed using 1.5% gel electrophoresis and then visualized by ethidium bromide stain where 10^1 copies could be detected for both WT DNA and IS DNA (figure 4).

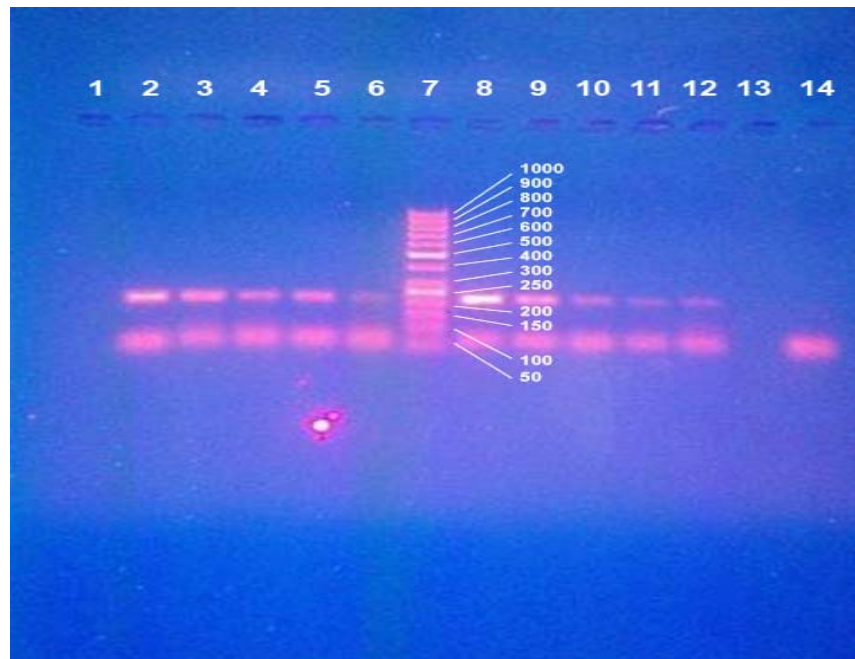


Figure 4: Ethidium bromide gel electrophoresis showing the analytical sensitivity of EBNA-1 QC - PCR for WT and IS plasmid DNA target

Lane 2, 3, 4, 5, 6 having 10^5 - 10^1 copies of the WT PCR products

Lanes 8, 9, 10, 11, and 12 having 10^5 - 10^1 copies of the IS PCR products

Lane 13 negative control (D.W)

Lane 14 positive control

As shown in figure 5, 10 fold serial dilution of 10^1 - 10^5 copies of WT DNA were spiked with increasing amounts of IS 10^1 - 10^5 DNA copies in separate reaction. Equivalent amplification and true competition was observed between

two DNA template (WT and IS). This was confirmed by the production of equal signals when similar amounts (10^3) of WT and IS DNA were present in the reaction mixture.