

# **Multi-amplification of Target Genes for Periodontal Pathogens in Continuous Flow PCR Microfluidic Chip**

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Fig.1S The user-interface of the program developed by LabVIEW.



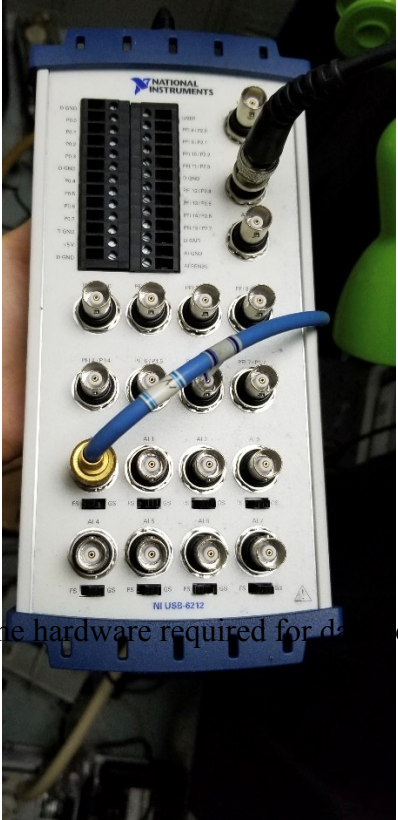


Fig.3S The hardware required for data collection.

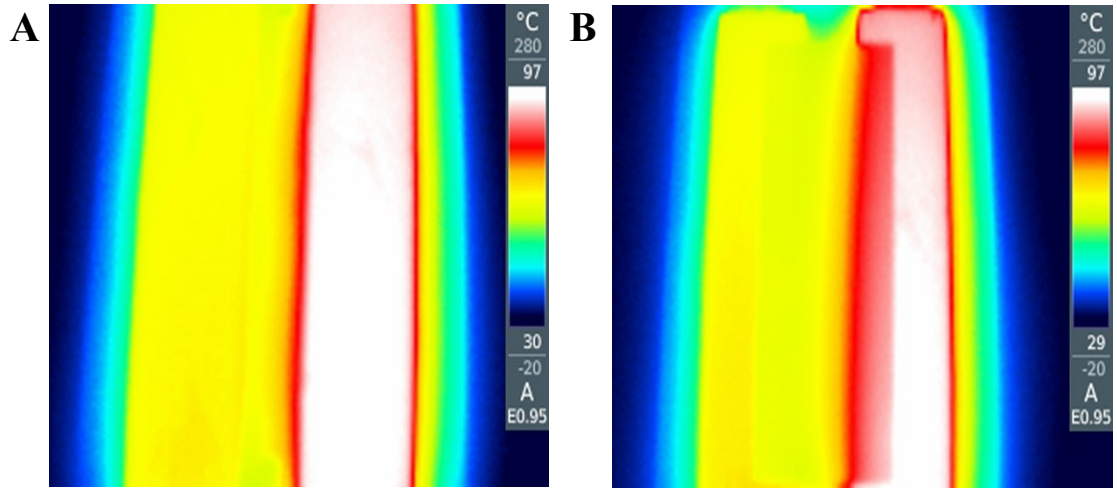


Fig.4S The temperature distribution of the heaters (A) without and (B) with slide.

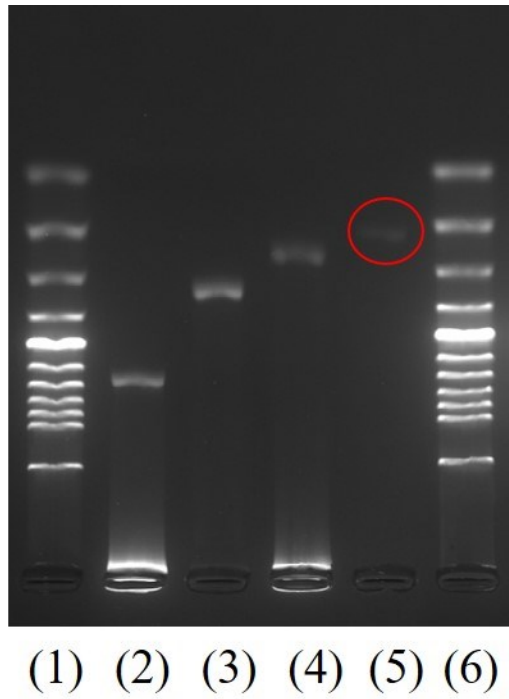


Fig.5S Slab gel electrophoresis of 100 bp DNA ladders (lane1 and lane 6) and PCR products of *T.f* (641 bp, lane 2), *T.d* (316 bp, lane 3), *T.f* (226 bp, lane 4) and *P.g* (197 bp, lane 5). Electrophoretic conditions: 2.0% agarose, 8 V/cm, 26 °C.

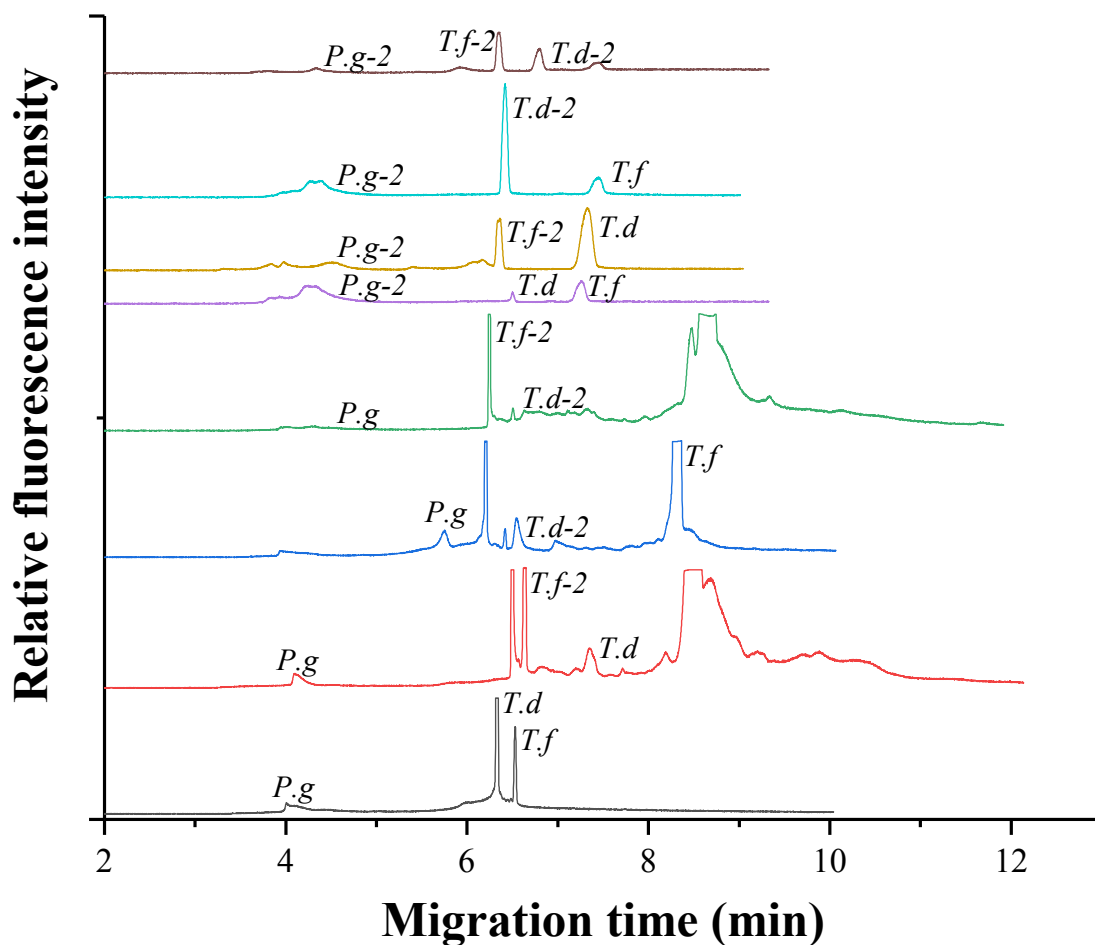


Fig.6S The electropherogram of multi-PCR products of *P.g*, *T.d* and *T.f* with other groups of primers. Capillary electrophoretic conditions: 0.5% HEC (1300k) in 0.5× TBE solution; electric field strength: 100 V/cm; sample injection (1500 V, 2.0 sec); total length and effective length of the capillary: 15.0 cm/8.0 cm.

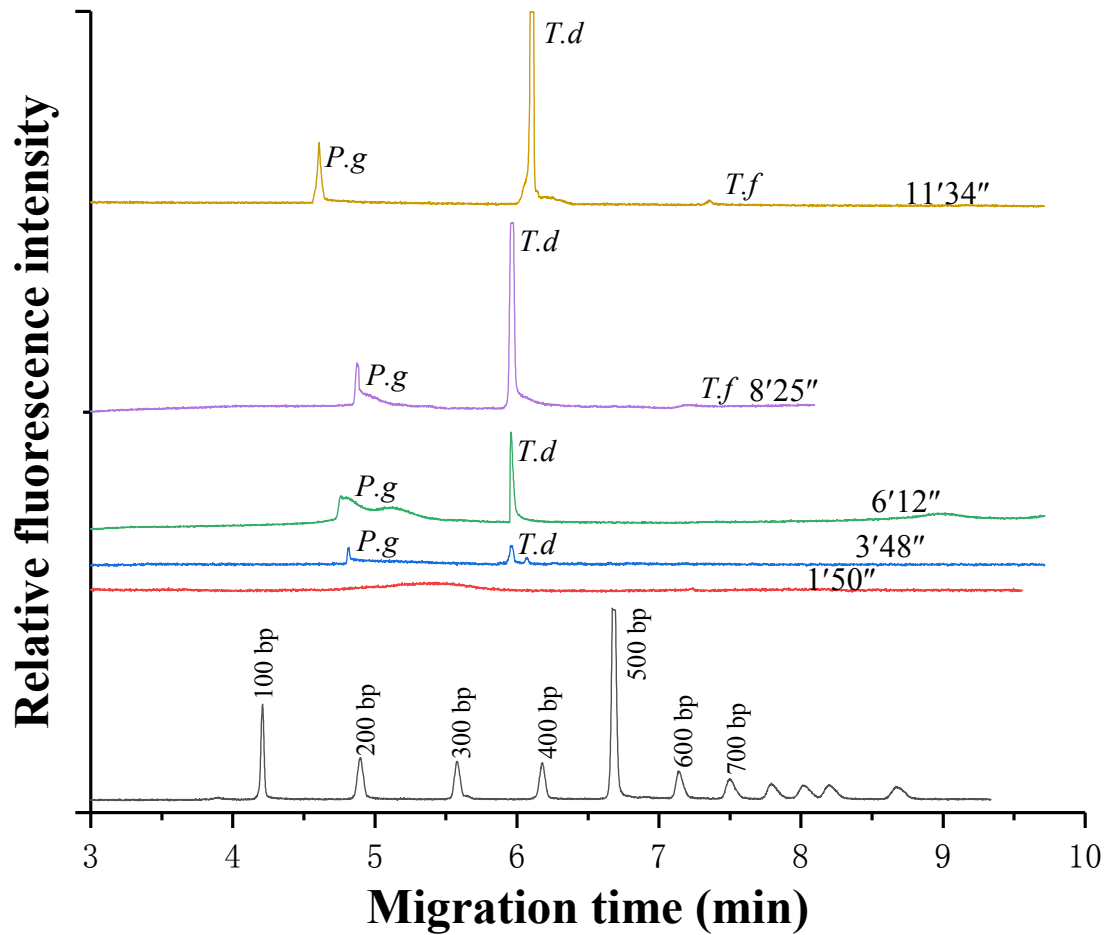


Fig.7S The electropherogram of multi-PCR of three kinds of bacteria (197 bp, 316 bp and 641 bp) with different CF-PCR time. Capillary electrophoretic conditions: 0.5% HEC (1300k) in 0.5× TBE solution; electric field strength: 100 V/cm; sample injection (1500 V, 2.0 sec); total length and effective length of the capillary: 15.0 cm/8.0 cm.



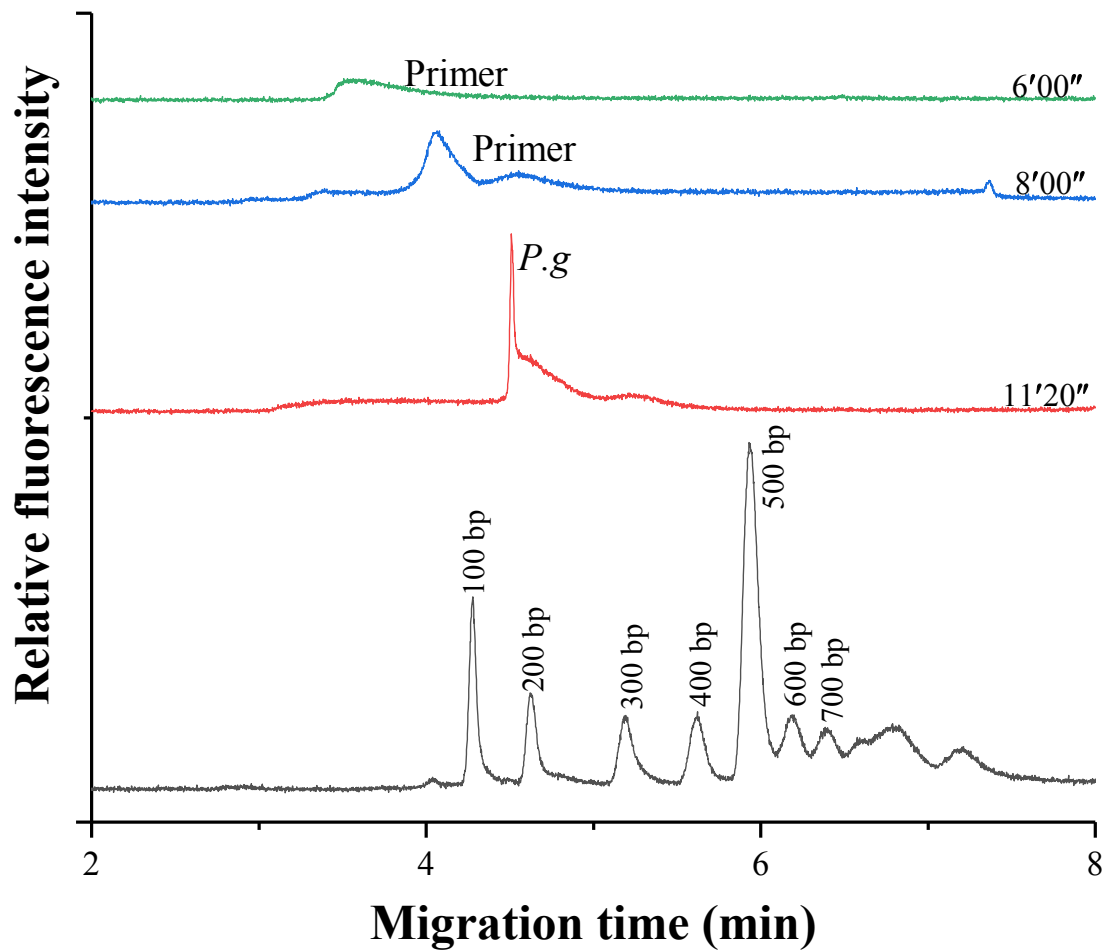


Fig.8S The electropherogram of multi-PCR of periodontal pathogens by conventional PCR thermal cycler with different time. Capillary electrophoretic conditions: 0.5% HEC (1300k) in 0.5× TBE solution; electric field strength: 100 V/cm; sample injection (1500 V, 2.0 sec); total length and effective length of the capillary: 15.0 cm/8.0 cm.

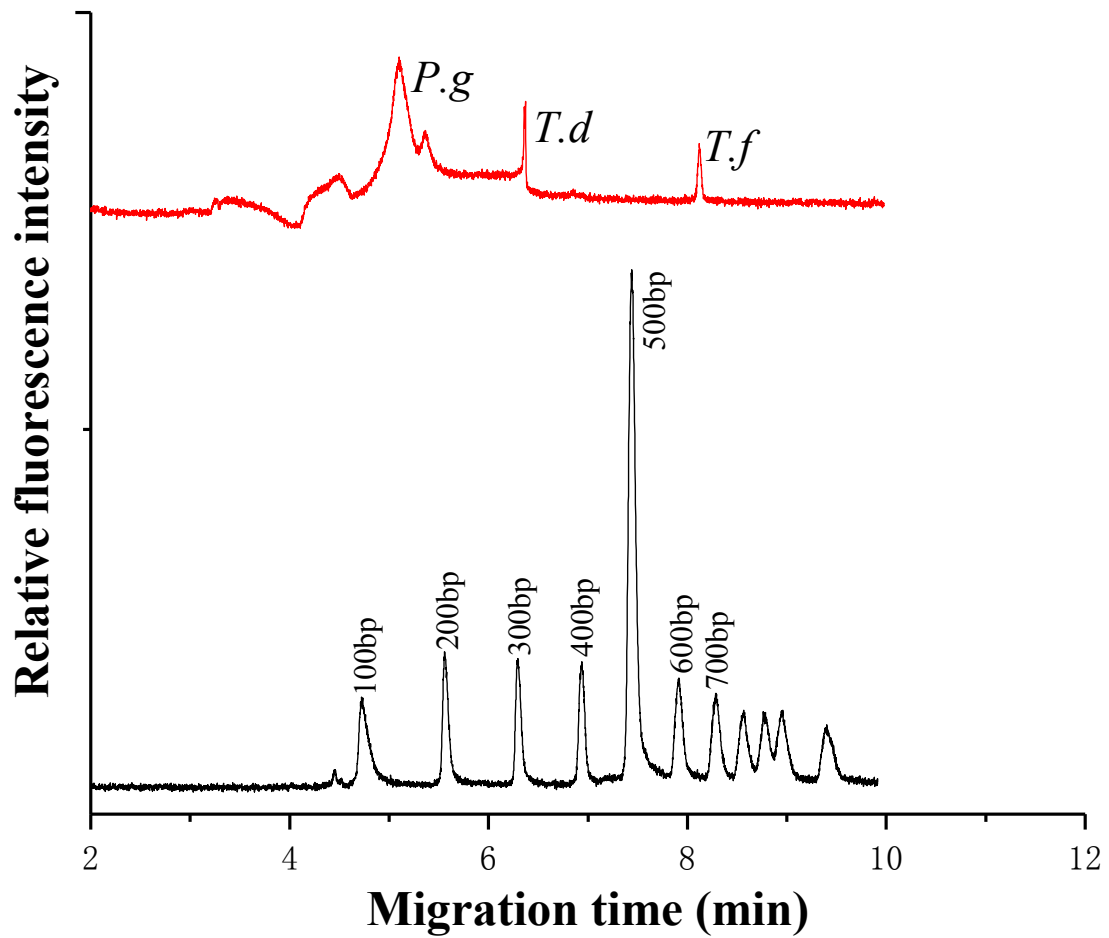


Fig.9S The electropherogram of multi-PCR of periodontal pathogens by conventional PCR thermal cyclers. Capillary electrophoretic conditions: 0.5% HEC (1300k) in 0.5× TBE solution; electric field strength: 100 V/cm; sample injection (1500 V, 2.0 sec); total length and effective length of the capillary: 15.0 cm/8.0 cm.