# DETERMINATION AND COMPARISON OF THE PARAMETERS OF BIOLOGICAL SAMPLE ANALYSIS USING Y-FILER® KITS (APPLIED BIOSYSTEMS) AND POWERPLEX® Y®23 SYSTEM (PROMEGA CORPORATION)

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We performed a sensibility study in order to compare two amplification kits from different suppliers (Applied Biosystems® and Promega Corporation®) for sex chromosome Y in blood sample FTA Gene Card® (GE Healthcare/Whatman) to implement their use in genetic typing of biological samples for DNA database of Registro Nacional de ADN, Medical Legal Service, Chile.

The samples were amplified under 25, 26 and 27 cycles to obtain the best results and later on were injected into ABI 3500® (Applied Biosystems) genetic analyzer by electrokinetic injection for 5 seconds. The data were interpreted with GeneMapper IDX v1.2.® (Applied Biosystems) software.

Analitical parameters such as determination of optimum number of cycles, calculation of stutter percents and concordance study were evaluated for both kits Applied Biosystems® and Promega Corporation®.