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Abstract Template

Title: Internal Validation of a 21 Autosomal STR Multiplex using half reaction volumes: the SureID® 21G Human STR Identification kit

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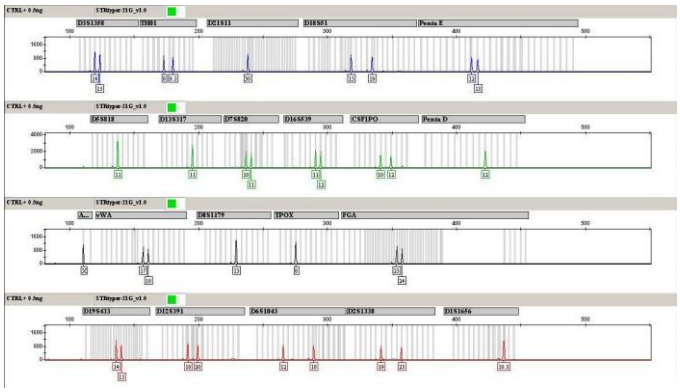
I. Abstract Body (up to 250 words)

The SureID® 21G Human STR Identification kit™, produced by Health Gene Technologies, uses a fast PCR fast-cycling PCR technology, which allows in a single multiplex assay, in less than 2 hours, the amplification of 20 autosomal STR loci and the sex locus Amelogenin, using a 5-dye technology. This kit is designed for forensic applications and paternity cases.
In the present study we performed the kit internal validation, evaluating its efficiency either on control samples than on a wide range of forensic samples when using reduced reaction volumes or direct amplification.
Some critical parameters such as sensitivity, precision, reproducibility, stochastic effects, intra/intercolor balance, peaks balance ratio, mixture detection have been studied.
Results demonstrates the use of reduced reaction volume, without altering components ratio, does not affect the SureID® 21G kit performance, allowing reliable and efficient analysis also of challenging casework samples.
In addition SureID® 21G kit may be successfully used for the direct amplification of a wide range of forensic samples without any need for extraction or purification : this allows reducing procedure time and costs.

II. Image:



III. Biography (Up to 100 words)

European PhD in Forensic Genetics from the University of Santiago de Compostela (Spain), Chief of the Forensic Genetics Department at Studio Indagini Mediche E Forensi (SIMEF), Italy, DNA Expert for Italian Penal and Civil Courts, Founder and President of the Worldwide Association of Women Forensic Experts (WAWFE) www.wawfe.org
Author of more than 100 presentations /publications about Forensic Genetics.

IV. Research interest:

Forensic DNA analysis

V. Presenting author details

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