

Educational Research (ISSN: 2141-5161) Vol. 12 (3)

Available online @http://www.interesjournals.org/ER

Copyright © 2021 International Research Journals

Short Communication

## Interior Validation of a 21 Auto somal STR Multiplex utilizing half response. Anamika Radesh

Department of Forensic Genetics University, Italy

## Abstract

The Human STR Identification, 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 performance, allowing reliable and efficient analysis also of challenging casework samples.

In addition 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.