

ESTIMATING THE PROBABILITY OF ALLELIC DROP-OUT IN STR DNA PROFILES

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Probabilistic approaches to assessing the strength of DNA evidence incorporate an estimate of the probability of allelic drop-out. We demonstrate a method for estimating the probability of both heterozygous and homozygous allelic drop-out, as recommended by Balding and Buckleton (2009). Using dye-specific analytical thresholds to maximize allelic data, we generate logistic regression curves based on average peak heights and observed percentages of allelic drop-out for both heterozygous and homozygous loci.