

VALIDATION OF THE MENTYPE® ARGUS X-8 KIT

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With the aim of using X-chromosomal polymorphic markers in Swiss crime cases (female DNA on a male background) and particularly in kinship testing, a validation study of the Mentype® Argus X-8 kit was performed. The Argus X-8 kit is a commercial multiplex system which contains Amelogenin for gender determination as well as eight X-chromosomal STR markers (DXS8378, HPRTB, DXS7423, DXS7132, DXS10134, DXS10074, DXS10101 and DXS10135). At any one time, two markers belong to the four coupling groups of the X-chromosome. Thus two markers of each group have to be handled as haplotype for genotyping. In this study, we present the results of some forensic validation studies including the following aspects: detection limit, evaluation of stutter bands, analysis of female/male mixtures, validation of our protocol consisting of blood on FTA cards and amplification in a small PCR reaction volume (10 µl). The use of these markers in a deficiency paternity case will also be shown.