NON-AMPLIFICATION OF AN ALLELE OF THE VWA LOCUS DUE TO A MISMATCH IN THE 3' TERMINUS OF THE PRIMER BINDING SITE

Nam Soo Cho^{1*}, Joong Seok Seo¹, Seung Beom Hong², Myun Soo Han²

¹Central District Office of National Institute of Scientific Investigation, Department of Forensic Medicine, Daejeon, Korea.

²National Institute of Scientific Investigation, DNA Analysis Division, Seoul, Korea.



During a family material case study using either the Perkin-Elmer AmpF/STR Profiler PCR amplification kit or the Promega GenePrint® FFv system, an inconsistency was observed at the vWA locus. No exclusions of maternity were found in the meiotic analyses of this family. This inconsistency was due to an extension failure of the original reverse primer in the Perkin-Elmer kit, resulting in false homozygotes. Sequence analysis revealed an A→C transversion at the position corresponding to the 3' end-point of the reverse primer of Perkin-Elmer AmpF/STR Profiler PCR amplification kit.