NEW PRIMER SETS FOR Y CHROMOSOME AND CODIS STR LOCI

Christian M. Ruitberg and John M. Butler

Successful PCR amplification from degraded DNA samples is typically a function of PCR product size. Smaller PCR products amplify better than larger ones when genomic DNA is degraded or PCR inhibitors are present. Hence, we have designed and tested new PCR primers at a number of STR loci that are closer to the repeat region than those primer used in commercially available multiplex typing the male portion of forensic DNA samples. Our Y-STR multiplexes utilize the following markers: DYS19, DYS391, DYS392, DYS435, DYS436, DYS437, DYS438, DYS439, Y-GATA-A7.1, Y-GATA-H4, and Y-GATA-A7.2.