



Search

for

[Limits](#) [Preview](#) [Index](#) [History](#) [Clipboard](#) [Details](#)

About Entrez

Text Version

**Entrez PubMed**[Overview](#)[Help | FAQ](#)[Tutorial](#)[New/Noteworthy](#)[E-Utilities](#)**PubMed Services**[Journal Browser](#)[MeSH Browser](#)[Single Citation Matcher](#)[Batch Citation Matcher](#)[Clinical Queries](#)[LinkOut](#)[Cubby](#)**Related Resources**[Order Documents](#)[NLM Gateway](#)[TOXNET](#)[Consumer Health](#)[Clinical Alerts](#)[ClinicalTrials.gov](#)[PubMed Central](#)[Privacy Policy](#)**1: J Forensic Sci 1997 Nov;42(6):1039-51**[Related Articles, Links](#)

## **Genetic individualization of domestic cats using feline STR loci for forensic applications.**

**Menotti-Raymond M, David VA, Stephens JC, Lyons LA, O'Brien SJ.**

Laboratory of Genomic Diversity, National Cancer Institute-Frederick Cancer Research and Development Center, MD, USA.

A group of ten short tandem repeat (STR) loci suitable for PCR typing from DNA of domestic cats is evaluated for genetic individualization using blinded samples of eight putative feline blood specimens. The ten loci were also typed in a 70 member cat pedigree to demonstrate Mendelian inheritance and independent assortment. A "match window" or measurement precision estimate was empirically established by determining the maximum gel migration difference among alleles identical by descent in different individuals of the pedigree. Hardy-Weinberg equilibrium and abundant heterozygosity was observed for each locus in cat population samples from Canada and the USA. The probabilities of two unrelated individuals matching by chance ( $P_m$ ) at all ten loci was estimated as  $1.35 \times 10(-10)$ . We present a conservative approach to compute, for forensic consideration, the mathematical likelihood of a chance genotypic match between DNA evidence from a crime scene and the suspect composite STR genotypes for species or populations when genotype frequency information is not available.

PMID: 9397545 [PubMed - indexed for MEDLINE]

[Write to the Help Desk](#)

[NCBI](#) | [NLM](#) | [NIH](#)

[Department of Health & Human Services](#)

[Freedom of Information Act](#) | [Disclaimer](#)

i686-pc-linux-gnu Sep 23 2002 19:02:17