

Customer: Jan Novák, Dlouhá 1, 30000 Plzeň, Czech Republic

Persons tested together

Person A

Sample: 08-12380
 Name: Jana Nováková DEMO
 Birth date: 31.12.1991
 Collection date: 03.03.2009
 Date received: 03.03.2009
 Sample type: buccal swab

Person B

Sample: 08-12350
 Name: Jiří Novák DEMO
 Birth date: 31.12.1962
 Collection date: 03.03.2009
 Date received: 03.03.2009
 Sample type: blood

| Marker | Person A | Person B | Paternity index PI |
|--|----------|--------------|--------------------|
| FGA | 20/24 | 20/21 | 1.7412952650 |
| D13S317 | 8/12 | 8/11 | 1.9157088120 |
| D21S11 | 29/31.2 | 28/29 | 1.2817785750 |
| D2S1338 | 17/23 | 17/19 | 1.3818407960 |
| D3S1358 | 15/17 | 15/17 | 2.1952254050 |
| CSF1PO | 11/12 | 12/12 | 1.5189854190 |
| D5S818 | 13/13 | 11/13 | 3.1820496500 |
| D16S539 | 11/11 | 11/11 | 3.6553362570 |
| D7S820 | 9/10 | 10/11 | 0.8962889925 |
| TPOX | 9/11 | 8/11 | 0.9863905325 |
| TH01 | 9/9.3 | 9.3/9.3 | 1.5579439250 |
| D8S1179 | 13/14 | 13/14 | 1.8649529280 |
| D18S51 | 16/18 | 12/18 | 3.0832305800 |
| vWA | 18/18 | 16/18 | 2.1843599830 |
| D19S433 | 14/16 | 14/14 | 1.3822228370 |
| Amelogenin | X/X | X/Y | |
| Combined paternity index (CPI) | | 5479.8022 | |
| Paternity likelihood ratio (LR) | | 99.9817545 % | |
| Priori probability | | 50 % | |

Interpretation: Analysis was performed using Investigator IDplex Plus Kit (Qiagen). The evaluation is based on microsatellite genotyping in terms of Mendel's laws of inheritance, Hardy-Weinberg equilibrium and on the use of Bayes' theorem and likelihood ratio. No matter how great is the weight of evidence in favour of the child-father relationship in comparison with the paternity of an unknown man, this test improves the result **5479**-fold. If the priori probability of paternity is 50 %, this test achieves the probability of **99.9817545 %**, what can be according to biostatistical Hummel's chart considered as **paternity practically proven**.

The lab does not have the ability to check if the names of the individuals belongs to sampled persons. Proper identification and assignment of samples is in the responsibility of the tested persons.

For the calculation, the proportionally reduced population frequencies taken from the below publication were used: Šimková, H., Faltus, V., Marvan, R., et al. Allele frequency data for 17 short tandem repeats in a Czech population sample. Forensic Science International: Genetics, 2009, vol. 4, no. 1, p. e15-e17.

Report date: 03.03.2009

Method: SOP165, fragment analysis of STR markers

Responsible person: Mgr. Martina Šafrová, Laboratory Manager



Genomia s.r.o, Republikánská 6, 31200 Plzeň, Czech Republic
www.genomia.cz, laborator@genomia.cz, tel: +420 373 749 999