

## **PATERNITY TESTING**

### **by DNA profile analysis**

#### **When might paternity testing become necessary?**

- When a man has doubts about the biological descent of his child
- When a man wants to prove that he is/ is not the father of a child
- When a mother wants to prove (for the man or for the court) that the man is the father of her child
- When a mother wants to become certain about the identity of her child's father
- When two (adult) persons seek father-child relationship after an early separation
- The method is also suitable for the clarification of other close family relationships (e.g., twin zygoty, sibship, half-sibship)

#### **Scientific background**

Testing starts with the isolation of DNA from the submitted samples. The DNA samples are then subjected to examination of 15 selected sites that show variability in length in the population. These 15 DNA fragments, with 2 copies each, make up a length pattern (profile) that is virtually unique to every person. In parent-child relationships, however, one copy of each fragment is identical by inheritance. In paternity testing, testing the mother helps to identify the paternal copies thus making testing more accurate. For the statistical calculations of the probability of paternity the frequencies of each length variation in the relevant population are considered. In most trio cases the probability of paternity either reaches 99.99% or is virtually zero. In motherless cases the number is, rarely, slightly lower.

#### **Types of testing**

- a.) curiosity testing: specimens are collected anonymously. A home sampling kit is mailed to the customer and the samples are mailed back to the laboratory.
- b.) court approved testing: specimen collection is performed in a formal way where each participant is identified by a picture ID, and the procedure is recorded on a witnessed and signed Specimen Collection Record. This can be done in person in the laboratory or by an authorized person (notary public, licensed physician, attorney, etc.) who mails the officially sealed samples directly to the laboratory.

#### **Paternity testing offered by our laboratory**

- Reliability: qualified staff, modern DNA-based technology
- Simplicity: painless in-home specimen collection that can be performed by anyone without previous training
- Fast service: results available in ten business days; expedited testing is also available
- Confidentiality: we handle your data confidentially throughout the whole course of testing