

Maternity analysis using DNA analysis

(basic information and contractual conditions in accordance with *GenDG**)

1. Purpose, type, scope and informative value of the examination

Purpose of the examination is the clarification of questionable parentage or relationship status as set out in the order with the help of a genetic analysis. Paternity, for example, is determined with a very high rate of accuracy (> 99.9 %) or the examined man is securely ruled out as the father.

With the exception of sex, the examined DNA markers do not allow for direct conclusions regarding personal traits and they are only used to determine questionable parentage or relationship status as set out in the order.

In very rare cases, the examination may, by pure chance, yield an indirect indication of a genetic abnormality, which may be of medical importance. In most cases, this abnormality is already known. If the examination yields findings that may be of medical importance, we will inform you accordingly.

2. Examination method

A DNA analysis is the fastest and most certain method of maternity analysis. In this examination, **15 different genetic characteristics** of the available person are determined and the **statistical probability** of biological maternity is calculated. This provides proof for confirmation or exclusion of maternity. As this test requires only a very small amount of DNA, almost all tests yield usable information. Our laboratory requires about 2 weeks to perform this analysis.

Possible **materials** are **blood** or a **cheek swab** (oral mucosa). The genetic material, the **DNA**, is extracted from these tissues and analysed. Afterwards, the so-called "**Short Tandem Repeats**" (STRs) are amplified using the polymerase chain reaction (PCR). The STRs consist of short sequence repetitions specific to every individual, which are located on the chromosomes. The total of examined STRs of a person provides the person's "genetic fingerprint", so to speak, which is unique for every examined person. At least 15 different STR systems are examined routinely.

As the child inherited one copy of DNA from each of its parents, it must be possible to determine one characteristic of the mother and one characteristic of the father in the child's DNA. If the maternal alleles of the child correspond to those of the potential mother, **maternity** of this child is **practically proven**. The biostatistical assessment provides the maternity probability, depending on the frequency of the alleles present. In the systems used, this probability is >99.9 %.

Cost for a maternity analysis amount to:

Potential mother and child (2 people)	EUR 390.00 (including statutory VAT)
Potential mother, father and child (3 people)	EUR 390.00 (including statutory VAT)
Potential mother, father, child 1, child 2 (4 people)	EUR 540.00 (including statutory VAT)

*German Genetic Diagnostics Act

3. Use of the collected genetic sample and the results obtained

The collected sample is destroyed immediately as soon as it is no longer needed for the purpose of the examination unless you have agreed to storage for a longer period (declaration of consent). You may revoke your consent to transfer in accordance with section 950 *BGB* [German Civil Code] at any time, either in writing or orally. In that case, your genetic sample will be destroyed immediately.

The results obtained are stored for 30 years after acknowledgement in accordance with the provisions of the *GenDG* (i.e. across the generations) and are destroyed after expiry of this period.

4. Right to revocation of consent

You have the right to revoke your consent regarding genetic analysis **at any time**, either in writing or orally towards the responsible person.

5. Right to non-information

You have a right to non-information, including the right to not acknowledge the result of the examination or parts thereof and to have these destroyed. Condition for destruction of the results is that you have not acknowledged them at a previous point.

If one of the persons involved in clarification of parentage or relationship status revokes consent or exercises his or her right to non-information and destruction of the results, the examination will initially be suspended with the goal of facilitating a decision of the parties involved regarding further procedure.

6. Contractual conditions

The order for a DNA test is effective once the signed application form including the samples and the signed declarations of consent of all persons or (legal) representatives were received by us and once the General Terms and Conditions of the specialist surgery were accepted.