## DNA Paternity Testing

**What is a DNA Test?**

Deoxyribonucleic acid (DNA) is the genetic material that is found in most cells in the human body. As we inherit 50% of our DNA from our mother and 50% from our father, we can compare the DNA from two people to determine if they have a biological relationship. For example, a DNA paternity test is performed to determine if a man is the biological father of a certain child.

**HOW DOES THE PATERNITY TEST WORK?**

To perform a paternity test, the laboratory extracts the DNA from the biological samples obtained from the mother, the child and the alleged father. The DNA is then analyzed, resulting in a genetic profile for each party. The profiles are compared to identify the child’s maternal DNA contribution and verify if the non-maternal characteristics can be found in the alleged father. If these characteristics are absent in the alleged father, he is excluded as the biological father of the child. If the characteristics match, a probability of paternity is calculated. The Orchid PRO-DNA Paternity Test provides a minimum probability of 99.99%.

A paternity test can be performed even if the mother is not available for testing. Orchid PRO-DNA can also perform a paternity test when the alleged father is deceased (Post-Mortem Paternity Test). In addition, Orchid PRO-DNA offers a prenatal paternity test for expecting mothers who wish to obtain paternity results before the birth of the child. The Prenatal Paternity Test requires a sample of amniotic fluid.

DNA testing can also be used to determine other relationships between family members, such as siblings, aunts/uncles (avuncular), grand-parents, as well as to evaluate whether twins are identical or fraternal.

**Paternity Testing Services**

Orchid PRO-DNA offers two types of paternity testing services. The laboratory procedures and the accuracy of the results are the same for both options.

**LEGAL PATERNITY TEST**

If you need the results of the DNA test to be used in a legal context (ex. child custody, child support, immigration, adoption or estate claims), we offer a service that ensures the admissibility of the test results in court. For the results to be legally admissible, the samples must be collected at one of our many collection centres, where specific chain of custody documents will be completed.

**HOME PATERNITY TEST**

The samples for a Home Paternity Test can be obtained by the parties themselves using a self collection kit. We will send you a sampling kit containing all the necessary material for the collection of the samples as well as instructions and consent forms. Once the samples have been collected, simply return them to Orchid PRO-DNA for analysis. The results of the Home Test are accurate and reliable, however since samples are self-collected and there is no chain of custody, the final report cannot be used in a legal matter.
HOW ARE SAMPLES TAKEN?

The DNA test is performed on a buccal (mouth) swab sample. The swab is rubbed gently on the inside of the party’s cheek to collect a saliva sample. This simple, painless type of collection procedure is as reliable as a blood sample. Moreover, it can be performed easily on children and adults alike.

- **Home Paternity Test**: Samples are self-collected.
- **Legal Paternity Test**: Samples are collected at one of our sample collection centres located throughout Canada. Parties can be tested together or separately, at different times and locations. A Customer Service representative will make an appointment for each participant at the nearest collection centre.

NON-STANDARD SAMPLES

In certain circumstances, when a buccal swab sample cannot be obtained, it may be possible to test non-standard samples. Please contact Customer Service for more information on testing possibilities.

RESULTS

Our DNA Paternity Test offers a clear unequivocal answer. If the alleged father is not the biological father, the probability of paternity will be 0%. If the alleged father is in fact the biological father, the paternity will be confirmed with a minimum probability of 99.99%.

Results are mailed within 5-7 business days from the receipt of the samples in our laboratory.

CONFIDENTIALITY

Your privacy and security are important to us. Orchid PRO-DNA treats all information in confidence.

OTHER DNA TESTS OFFERED

- Maternity
- Full and half sibship
- Grandparentage
- Avuncular (aunt/uncle)
- Twin zygosity
- Genetic identity (DNA profile)
- Immigration testing
- Y-STR (paternal lineage) and mitochondrial DNA (maternal lineage)
- Forensic analysis

Our DNA testing specialists also provide expert testimony, consultation and court assistance.