



# KINSHIP DNA TESTING

A kinship DNA test involves the use of DNA analysis to examine any alleged biological relationship other than paternity or maternity. It may be used to test relationships between individuals as closely related as half-siblings or could potentially be used to compare the DNA of those who are many generations removed. DNA testing has evolved to the point where there are a multitude of technologies and software programs that, in the hands of skilled DNA laboratory experts, can provide results with a high degree of accuracy in the majority of cases. Orchid Cellmark's consultants provide their expert guidance to help you decide on the most appropriate individuals to test, as well as the technology which will be likely to yield the most conclusive results.

## Description of Orchid Cellmark's Services

### Autosomal STR testing

- Routine DNA technology used to test individuals who are allegedly related and who are generally not separated by more than 2 generations
- Examples of relationships which can be tested include full sibling, half sibling, aunt-nephew, grandparent-grandchild
- It is preferred that a minimum of 3 individuals whose relationship to the tested party is "known" are tested

### Y-STR testing

- Specialized testing of two or more males to determine whether they have a common paternal lineage
- Testing is accomplished via an examination of Y-STR DNA segments present only on the male chromosome

### Mitochondrial DNA testing

- Specialized testing of two or more individuals to determine whether they have a common maternal lineage
- Testing is conducted via an analysis of the mitochondrial DNA present in the mitochondria of all cells of all individuals
- Males and females inherit mt-DNA from their mothers, but males do not pass it to their children
- Individuals of the same generation and of the same maternal lineage will share the same mt-DNA profile with each other
- Individuals of more distant generations will share the same maternal lineage as long as their common ancestors are all females

### Kinship Simulations

- Using proprietary, sophisticated software, it is possible to predict the possible outcomes of a particular testing scenario
- Simulation results provide a typical result as well as the range of possible results
- Allows clients to choose the appropriate number of individuals to test

For more information, please call:  
**1-866-TEST-DNA (837-8362)**

**ORCHID  
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Experience the Power of DNA