

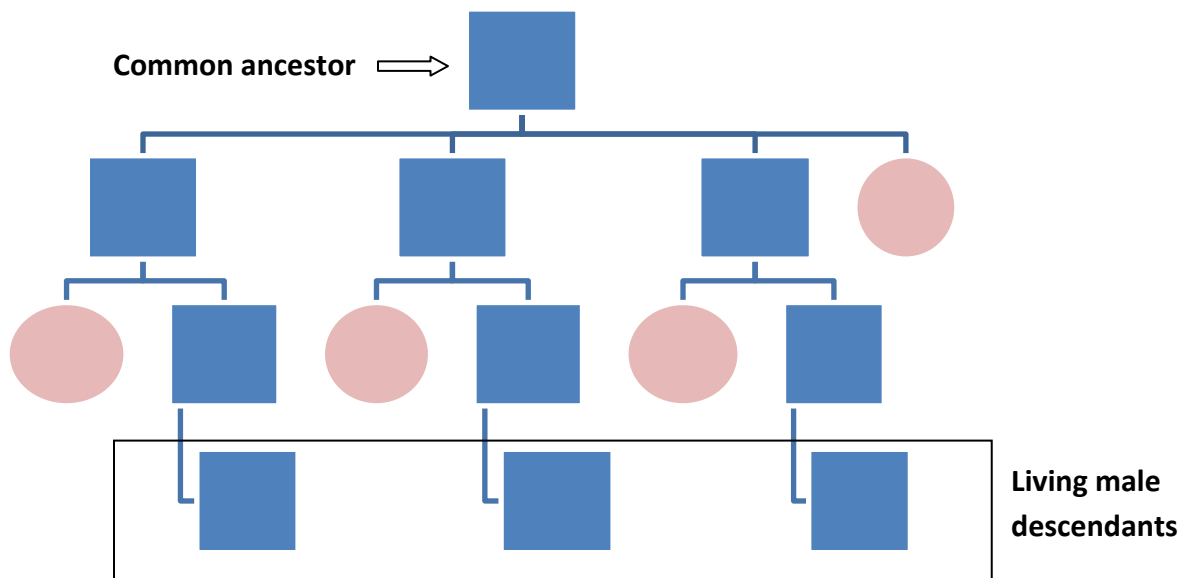
GENETECH:

Y-DNA Solutions to Common Genealogical Problems

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Does the key to your family tree lie inside of you?

DNA testing has become an accepted tool for identifying ancestors. Information stored in the Y-chromosome passes virtually unchanged from father-to-son for centuries (see Figure). Analysis of this genetic information, found in living people, can help you determine whether or not you share a common ancestor with another person alive today. Computer algorithms predict approximately how long ago the common ancestor lived. These results have many genealogical applications.



What is the risk?

- Non-paternal events might be revealed (adoptions, illegitimacies)
- Dud. Your DNA may be extremely common and result in excessive matches.

Who can be tested?

- Males with the same surname as the ancestor of interest.

How do I get tested?

- Select a company
- Order a kit
- Collect your DNA
- Mail it to a lab

Which test do I take?

- YDNA test with at least 30 markers

How much does it cost?

Company	Ancestry DNA	Family Tree DNA	Gene Tree
Markers	33	37	46
Price*	\$149	\$169	\$179
Website	dna.ancestry.com	familytreedna.com	genetree.com

*Standard prices as of December 1, 2011

- You may need to test more than one individual.
- You may need to purchase more refined tests at higher prices.

Considerations for selecting a company

- Which companies have the largest databases?
- Which companies have surname projects of interest?

Interpreting results

- Identifying matches.

Sharing results

- Contacting matches.
- Databases.

Genealogical applications

- Migrations.
- Surname origins.
- Name changes.
- Non-paternal events.
- Common surnames.
- Ethnic origin.

Online resource

1. Chris Pomery's DNA Testing Resources File is a free download at <http://www.dnaandfamilyhistory.com/downloads>.
 - Up-to-date online resources and training from a leading expert in the field.
2. Randy Seaver's series of blog posts about DNA testing at Genea-Musings <http://www.geneamusings.com/2009/03/my-y-dna-results-post-9-looking-for.html>. Step-by-step guide to interpreting and sharing results.

Additional reading

1. "Genealogy and Genetics: A Theme Issue," *National Genealogical Society Quarterly*, Vol. 93, No. 4 (Dec. 2005).
 - Case studies demonstrating genealogical applications for Y-DNA testing
2. Sykes, Bryan. *The Seven Daughters of Eve*. New York City: W.W. Norton, 2001.
 - New York Times best-selling account of the discovery of genetic genealogy testing
3. Turner, Ann and Megan Smolenyak. *Trace Your Roots with DNA: Using Genetic Tests to Explore Your Family Tree*. Emmaus, Penn.: Rodale Books, 2004.
 - Explanation of Y-DNA testing from a genealogist's perspective